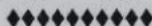


27. How much area the Baltoro Glacier covers?
(a) 1,000 sq. km (b) 1,220 sq. km
(c) 1,500 sq. km (d) 1,800 sq. km
28. Where the Siachen Glacier is situated?
(a) Baltistan (b) Skardu
(c) AJ & K (d) Hunza
29. On which range the Siachen Glacier is located?
(a) Hindu Kush (b) Karakoram
(c) Himalaya (d) None of them

Answere Key

- | | | | | | | | | | | | | | | | |
|----|---|----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|
| 1. | c | 5. | c | 9. | a | 13. | c | 17. | d | 21. | c | 25. | d | 29. | b |
| 2. | b | 6. | a | 10. | c | 14. | d | 18. | a | 22. | c | 26. | c | | |
| 3. | a | 7. | b | 11. | a | 15. | b | 19. | d | 23. | b | 27. | b | | |
| 4. | d | 8. | c | 12. | b | 16. | c | 20. | c | 24. | a | 28. | a | | |



Info

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CONSTITUTIONAL DEVELOPMENT IN PAKISTAN

1. Who was the first elected president of Pakistan?
 - (a) Ayub Khan
 - (b) Muhammad Ali Bogra
 - (c) Zafar ullah Khan
 - (d) Abdul Rab Nishter
2. Quaid-e-Azam elected as the first President of Constituent Assembly on:
 - (a) 10th August 1947
 - (b) 11th August 1947
 - (c) 12th August 1947
 - (d) 13th August 1947
3. First meeting of constituent assembly of Pakistan was held on:
 - (a) 10th August 1947
 - (b) 11th August 1947
 - (c) 12th August 1947
 - (d) 13th August 1947
4. Who was the Chairman of Boundary Commission to define the boundaries of the dominions under the Indian Independence Act of 1947?
 - (a) Lord Wavell
 - (b) Stafford Cripps
 - (c) Lord Mountbatten
 - (d) Cyril Radcliffe
5. When was the Pakistan Constituent Assembly constituted?
 - (a) July 20, 1947
 - (b) June 20, 1947
 - (c) August 20, 1947
 - (d) August 25, 1947
6. How many members were there in the Constituent Assembly when it was set up?
 - (a) 59
 - (b) 69
 - (c) 79
 - (d) 80
7. How many members were later added to the Constituent Assembly?
 - (a) 5
 - (b) 8
 - (c) 9
 - (d) 10
8. On what date did the Quaid-e-Azam Address the Constituent Assembly for the first time?
 - (a) 10 August 1947
 - (b) 11 August 1947
 - (c) 20 August 1947
 - (d) 25 August 1947
9. Who was the first President of the Constituent Assembly?
 - (a) Khawaja Nazim-ud-Din
 - (b) Liaquat Ali Khan
 - (c) Quaid-e-Azam
 - (d) Abdul Rab Nishter
10. The interim constitution of the Pakistan was based on:
 - (a) Indian Act, 1935 (amended)
 - (b) Indian Independence Act, 1947
 - (c) a and b
 - (d) None of the above
11. Who was the first Governor-General of Pakistan?
 - (a) Liaquat Ali Khan
 - (b) Abdul Rab Nishter
 - (c) Quaid-e-Azam
 - (d) Raja Ghazanfar
12. Who was the second Governor-General of Pakistan?
 - (a) Liaquat Ali Khan
 - (b) Abdul Rab Nishter
 - (c) Khawaja Nazim-ud-Din
 - (d) Raja Ghazanfar
13. Who was the first Prime Minister of Pakistan?
 - (a) Khawaja Nazim-ud-Din
 - (b) Liaquat Ali Khan
 - (c) Abdul Rab Nishter
 - (d) I.I. Chundrigar
14. Who was the second Prime Minister of Pakistan?
 - (a) Khawaja Nazim-ud-Din
 - (b) Abdul Rab Nishter
 - (c) I.I. Chundrigar
 - (d) Malik Ghulam Muhammad
15. Who was the second President of Pakistan?
 - (a) Ayub Khan
 - (b) Muhammad Ali Bogra
 - (c) Zafar ullah Khan
 - (d) Abdul Rab Nishter
16. Bahawalpur was the first state which joined Pakistan

- (a) 1947 (b) 1949
(c) 1953 (d) 1955
17. When the Constituent Assembly passed the Objective Resolution?
(a) February 1949 (b) 12th March 1949
(c) April 1949 (d) March 1948
18. When Governor-General dismissed the cabinet of Khawaja Nazim-ud-Din?
(a) 17 March, 1953 (b) 17 April, 1953
(c) 16 April, 1953 (d) 15 June, 1953
19. How many years the 1st Constituent Assembly lasted?
(a) 7 (b) 8
(c) 9 (d) 10
20. Name the person who took over after the dismissal of Khawaja Nazim-ud-Din?
(a) Muhammad Ali Bogra
(b) Ch. Muhammad Ali
(c) I.I. Ghundrigar
(d) None of the above
21. Who dissolved the Federal Assembly on 24 October, 1954?
(a) Sikandar Mirza
(b) Ghulam Muhammad
(c) Ayub Khan
(d) None of the above
22. Liaquat Ali Khan was assassinated:
(a) 17, October 1947
(b) 18, October 1948
(c) 16, October 1951
(d) 19, October 1950
23. First census was held in Pakistan in:
(a) 1947 (b) 1948
(c) 1951 (d) 1950
24. The system of Government introduced by Constitution of 1956 was:
(a) Provincial (b) Federal
(c) Confederal (d) Dictatorial
25. Ch. Muhammad Ali became Prime Minister in:
(a) 1953 (b) 1954
(c) 1955 (d) 1956
26. In which year one unit was created?
(a) 1953 (b) 1954
(c) 1955 (d) 1956
27. The 2nd Constituent Assembly passed the "First Constitution" (1956) on 2nd March, 1956 which was enforced on:
(a) 23 June, 1956
(b) 23 July, 1956
(c) 14 August, 1956
(d) 23 March, 1956
28. Sakindar Mirza became the first president of Pakistan in:
(a) 1953 (b) 1954
(c) 1955 (d) 1956
29. Sikandar Mirza abrogated the 1956 Constitution and dissolved Assemblies on:
(a) 7th October 1958
- (b) 7th October 1959
(c) 7th October 1960
(d) 7th October 1961
30. The basic institution under the 2nd Constitution (1962) was the Electoral College, consisting of:
(a) 80000 (b) 82000
(c) 84000 (d) 85000
31. The Constitution of 1962 was enforced on:
(a) 14th March, 1962
(b) 23rd March 1962
(c) 30th June, 1962
(d) 8th June, 1962
32. Martial Law was imposed by Sikandar Mirza on:
(a) 8th October 1958
(b) 8th October 1959
(c) 8th October 1960
(d) 8th October 1961
33. Ayub Khan became the president of Pakistan:
(a) 27th October 1958
(b) 27th October 1959
(c) 27th October 1960
(d) 27th October 1961
34. The designation of Governor-General was changed to President in:
(a) 1956 (b) 1957
(c) 1958 (d) 1959
35. Third constituent assembly came into existence in:
(a) 1958 (b) 1959
(c) 1960 (d) 1962
36. Fourth constituent assembly is brought into existence by Ayub Khan:
(a) 1966 (b) 1967
(c) 1968 (d) 1969
37. Tashqand Treaty was signed between Pakistan and India on:
(a) 10th January 1966
(b) 10th January 1967
(c) 10th January 1968
(d) 10th January 1969
38. Pakistan People's Party was formed by Z.A. Bhutto:
(a) 1966 (b) 1967
(c) 1968 (d) 1969
39. Second Martial Law was imposed by General Yahya Khan:
(a) 1966 (b) 1967
(c) 1968 (d) 1969
40. Swat and Chitral joined Pakistan:
(a) 1966 (b) 1967
(c) 1968 (d) 1969
41. First General elections were held:
(a) 1970 (b) 1971
(c) 1972 (d) 1973
42. When was the Constitution of 1973 enforced?
(a) 10th April, 1973

- (b) 14th August 1973
(c) 10th March 1973
(d) 10th August 1973
43. In which Constitution system of Zakat and Ushr was introduced in the country?
(a) 1956 (b) 1962
(c) 1973 (d) 1985
44. Under which Constitution it was made the responsibility of the Government to make arrangements for religious education?
(a) 1956 (b) 1973
(c) 1968 (d) 1962
45. A new province Baluchistan was established:
(a) 1970 (b) 1971
(c) 1972 (d) 1973
46. One unit was dissolved on:
(a) 1st July 1970 (b) 1st July 1971
(c) 1st July 1972 (d) 1st July 1973
47. East Pakistan was separated on:
(a) 16th December 1970
(b) 16th December 1971
(c) 16th December 1972
(d) 16th December 1973
48. In which Constitution Islam was declared religion of the state?
(a) Constitution of 1956
(b) Constitution of 1973
(c) Constitution of 1968
(d) Constitution of 1962
49. First Amendment was took place in constitution of 1973 in:
(a) 1970 (b) 1971
(c) 1972 (d) 1974
50. Which amendment declared the status of Qadianis and Ahmad as minority on September 7, 1974?
(a) 1st (b) 2nd
(c) 3rd (d) 4th
51. When the government of Zulfikar Ali Bhutto was dismissed and third Martial Law was enforced by General Zia-ul-Haq?
(a) 8th December, 1977
(b) 5th July, 1977
(c) 15th July, 1977
(d) 25th October, 1977
52. During the period of martial law (1977-85), the constitution of 1973 was:
(a) abrogated
(b) held in abeyance
(c) partially abrogated
(d) None of these
53. When President Zia-ul-Haq enforced an Interim Constitution?
(a) 1977 (b) 1981
(c) 1978 (d) 1979
54. When President Zia-ul-Haq constituted Majlis-e-Shoora (National Assembly)?
(a) October 1980
- (b) December 1981
(c) November 1980
(d) December 1980
55. Which amendment made on April 23, 1974 defined the boundaries of Pakistan?
(a) 2nd (b) 4th
(c) 3rd (d) 1st
56. Which amendment made on February, 1975 empowered the Parliament to lift the state of emergency at any time?
(a) 4th (b) 6th
(c) 5th (d) 3rd
57. Which amendment made on November 21, 1975 Provided the additional seats for minorities and also deprived of the power to grant bail to any person detained under any preventive detention?
(a) 4th (b) 5th
(c) 2nd (d) 6th
58. After the elections of 1985 who was elected the Prime Minister of Pakistan?
(a) Ilyas Bux Soomro
(b) Muhammad Khan Junejo
(c) Nawaz Sharif
(d) Benazir Bhutto
59. After the death of Zia-ul-Haq on 17th August, 1988 who was made the President of Pakistan?
(a) Abdul Hamid Jatoi
(b) Ghulam Ishaq Khan
(c) Farooq Ahmad Leghari
(d) Moeen-ud-Din Qureshi
60. Former Prime Minister of Pakistan Zulfikar Ali was executed
(a) 4th April 1979 (b) 4th April 1980
(c) 4th April 1981 (d) 4th April 1982
61. Who dismissed the Government of Benazir Bhutto in 1990?
(a) Farooq Ahmad Leghari
(b) Ghulam Ishaq Khan
(c) Malik Miraj Khalid
(d) Abdul Waheed Kakir
62. The elections for Assemblies were held in October 2002 when the elections for Senate were held?
(a) January 2003 (b) February 2003
(c) March 2003 (d) April 2003
63. Elections for 8th constitution assembly held, PPP emerged as the single largest party:
(a) 1988 (b) 1989
(c) 1990 (d) 1991
64. Benazir became the first woman Prime Minister of Pakistan in:
(a) 1988 (b) 1989
(c) 1990 (d) 1991
65. The government of Benazir Bhutto was dismissed for the second time on November 5, 1996 by:
(a) Ghulam Ishaq Khan

- (b) Malik Miraj Khalid
(c) Farooq A. Leghari
(d) Nawaz Sharif
66. Which party got absolute majority in the elections of 1997?
(a) People's Party
(b) Muslim League
(c) Islami Jamhori Ittehad
(d) Mutheda Majlis-e-Amal
67. As a result of 1997 elections who became the Prime Minister of Pakistan?
(a) Zafar-ullah Jamali
(b) Benazir Bhutto
(c) Nawaz Sharif
(d) Farooq Ahmad Leghari
68. Pakistan exploded its nuclear device at Chaghi on
(a) 26th May 1998 (b) 25th May 1998
(c) 28th May 1998 (d) 1st June 1998
69. When Pervaiz Musharraf took over the government after removing Nawaz Sharif?
(a) 10th October, 1999
(b) 11 October, 1999
(c) 12th October, 1999
(d) 13th October, 1999
70. Who imposed educational limit of graduation for contesting the elections?
(a) General Musharraf
(b) Benazir Bhutto
(c) Nawaz Sharif
(d) Miraj Khalid
71. Elections for 9th constituent assembly were held on:
(a) 24th October 1988
(b) 24th October 1989
(c) 24th October 1990
(d) 24th October 1991
72. Under which amendment enforcement of Shariat Bill has been announced and was passed by the National Assembly on October 10, 1998?
(a) 16th (b) 17th
(c) 15th (d) 14th
73. Under which amendment the quota system was extended for another 20 years?
(a) 16th (b) 18th
(c) 15th (d) 14th
74. Nawaz Sharif elected as Prime Minister of Pakistan:
(a) 6th November 1988
(b) 6th November 1989
(c) 6th November 1990
(d) 6th November 1991
75. The amendment made in 1977 to hold referendum by the President of Pakistan was:
(a) 8th (b) 11th
(c) 10th (d) 7th
76. Which of the following amendments made on December 30, 1985 divided the executive powers at the federal level between Prime Minister and President?
(a) 8th (b) 9th
(c) 10th (d) 12th
77. The general elections for the 10th Constituent Assembly was held:
(a) 6th October 1993
(b) 6th October 1994
(c) 6th October 1995
(d) 6th October 1996
78. Which amendment made on July 8, 1986 provided that the injunctions of Islam as laid down in Holy Quran and Sunnah shall be the supreme law and source of guidance of legislation?
(a) 12th (b) 11th
(c) 10th (d) 9th
79. 8th Gen Elections were held in Pakistan for 12th Constitution Assembly
(a) 10th October 2002
(b) 10th October 2003
(c) 10th October 2004
(d) 10th October 2005
80. 17th amendment was passed which restored 58(2)B:
(a) 31st December 2002
(b) 31st December 2003
(c) 31st December 2004
(d) 31st December 2005
81. Farooq Ahmad Khan Leghari elected as the President
(a) 1993 (b) 1994
(c) 1995 (d) 1996
82. Who became the Prime Minister of Pakistan as a result of October 1990 elections?
(a) Muhammad Khan Junejo
(b) Benazir Bhutto
(c) Farooq Ahmad Leghari
(d) Nawaz Sharif
83. Referendum, which made General Musharraf President of Pakistan was held in:
(a) June, 2001 (b) April 2002
(c) Dec, 2002 (d) December, 2001
84. Pakistan became the member of WTO:
(a) 1993 (b) 1994
(c) 1995 (d) 1996
85. Nawaz Sharif took oath of office as Prime Minister of Pakistan for the second time on:
(a) 13th February 1997
(b) 13th February 1998
(c) 13th February 1999
(d) 13th February 2000
86. Through 13th amendment Articles 58(2b) and 112(2)(b) were deleted from the constitution:
(a) 1st April 1997 (b) 1st April 1998
(c) 1st April 1999 (d) 1st April 2000
87. General elections for 11th Constituent Assembly were held on:
(a) 2nd February 1997

- (b) 2nd February 1998
(c) 2nd February 1999
(d) 2nd February 2000
88. Nuclear device was exploded at Chaaghi on:
(a) 28th May 1997 (b) 28th May 1998
(c) 28th May 1999 (d) 28th May 2000
89. Muhammad Rafique Tarar elected as President of Pakistan:
(a) 1997 (b) 1998
(c) 1999 (d) 2000
90. Which amendment relates to the establishment of special courts for trial of heinous offences?
(a) 13th (b) 11th
(c) 10th (d) 12th
91. Under which amendment made on April 1, 1997 president could not dissolve the National Assembly and dismiss the Prime Minister?
(a) 14th (b) 16th
(c) 13th (d) 11th
92. General Musharraf assumed the office as 10th President of Pakistan.
(a) 20th June 1997 (b) 20th June 1998
(c) 20th June 2001 (d) 20th June 2000
93. Mir Zafar Ullah Jamali sworn-in as 21st Prime Minister of Pakistan
(a) 23rd November 2002
(b) 23rd November 2003
(c) 23rd November 2004
(d) 23rd November 2005
94. Which amendment passed on December 31, 2003 restored 58(2)(b)?
(a) 16th (b) 15th
(c) 17th (d) 14th
95. Through the LFO issued by General Musharraf, the strength of the National Assembly was increased from 217 to?
(a) 285 (b) 342
(c) 385 (d) 410
96. Through the LFO the senate seats were increased from 87 to:
(a) 95 (b) 105
(c) 100 (d) 102
97. Prime Minister Zafar Ullah Jamali resigned on:
(a) 25th June 2002 (b) 25th June 2003
(c) 25th June 2004 (d) 25th June 2005
98. Shujaat Hussain took oath as Prime Minister of Pakistan on:
(a) 29th June 2002 (b) 29th June 2003
(c) 29th June 2004 (d) 29th June 2005
99. Shaukat Aziz sworn as 22nd Prime Minister of Pakistan on:
(a) 28th August 2002 (b) 28th August 2003
(c) 28th August 2004 (d) 28th August 2005
100. Pakistan successfully test fired its first cruise missile (Babar) on:
(a) 12th August 2002 (b) 12th August 2003
(c) 12th August 2004 (d) 12th August 2005
101. Since 1947 till 2006 how many National Assemblies have functioned in Pakistan?
(a) 12 (b) 11
(c) 10 (d) 13
102. 18th amendment was passed by National Assembly on
(a) 8th April 2010 (b) 19th April 2010
(c) 15th April 2010 (d) 27th April 2010
103. 18th amendment was passed by Senate on:
(a) 9th April 2010 (b) 19th April 2010
(c) 15th April 2010 (d) 27th April 2010
104. 18th amendment was ratified by President of Pakistan on
(a) 9th April 2010 (b) 19th April 2010
(c) 15th April 2010 (d) 27th April 2010
105. 18th amendment abolished article _____ of constitution of 1973 which empowers the president in his sole discretion to dissolve the National Assembly.
(a) Article 58 (2)(C) (b) Article 58 (3)(B)
(c) Article 58 (2)(B) (d) Article 58 (2)(D)
106. In the 18th amendment N.W.F.P was renamed as:
(a) Khyber Pakhtunehwa
(b) Serhad
(c) Pakhtunehwa
(d) Khyber
107. Out of 342 members of the National Assembly how many voted in favour of the 18th amendment?
(a) 271 (b) 280
(c) 292 (d) 296
108. Through the 18th amendment powers of the President have been curtailed are:
(a) Dissolve the Parliament unilaterally
(b) Declare emergency rule in any province unilaterally
(c) Appoint the head of the Election Commission
(d) All of the above
109. In the 18th amendment the number of clauses is:
(a) 45 (b) 102
(c) 91 (d) 109
110. Senate of Pakistan is consist of members after the 18th amendment:
(a) 100 (b) 122
(c) 104 (d) 112
111. How many amendments have been taken in the Constitution of Pakistan?
(a) 17 (b) 25
(c) 22 (d) 23
112. Which amendment in the Constitution of Pakistan is tabled for the creation of more provinces?
(a) 17th (b) 19th

(c) 20th (d) 18th

113. When Ayub Khan took over power in 1958, the Prime Minister of Pakistan was:

- (a) Muhammad Ali Bogra
(b) Hussain Shaheed Suharwardy
(c) Malik Feroz Khan Noon
(d) Chaudhary Muhammad Ali

114. The Office of District Magistrate was abolished through:

- (a) Local Government Ordinance 2001
(b) Police Order 2002

(c) Amendments in the Code of Criminal Procedure

(d) 17th Amendment in the Constitution

115. Doctrine of necessity was used in the case for the first time in the history of Pakistan.

- (a) Maulvi Tamiz-ud-Din Vs State case
(b) Dossai Vs State case
(c) Asma Jahangir Vs State case
(d) Nusrat Bhutto Vs State case

Answer Key

| | | | | | | | |
|-------|-------|-------|-------|-------|-------|--------|--------|
| 1. a | 16. a | 31. d | 46. a | 61. b | 76. a | 91. c | 106. a |
| 2. b | 17. b | 32. a | 47. b | 62. b | 77. a | 92. c | 107. c |
| 3. a | 18. b | 33. a | 48. b | 63. a | 78. d | 93. a | 108. c |
| 4. d | 19. a | 34. a | 49. d | 64. a | 79. a | 94. c | 109. b |
| 5. a | 20. a | 35. d | 50. b | 65. c | 80. b | 95. b | 110. c |
| 6. b | 21. b | 36. a | 51. b | 66. b | 81. b | 96. c | 111. b |
| 7. d | 22. c | 37. a | 52. b | 67. c | 82. d | 97. c | 112. c |
| 8. b | 23. c | 38. b | 53. b | 68. c | 83. b | 98. c | 113. c |
| 9. c | 24. b | 39. d | 54. b | 69. c | 84. c | 99. c | 114. c |
| 10. c | 25. c | 40. d | 55. d | 70. a | 85. a | 100. d | 115. a |
| 11. c | 26. c | 41. a | 56. b | 71. c | 86. a | 101. a | |
| 12. c | 27. d | 42. b | 57. a | 72. c | 87. a | 102. a | |
| 13. b | 28. d | 43. c | 58. b | 73. a | 88. b | 103. c | |
| 14. a | 29. a | 44. b | 59. b | 74. c | 89. b | 104. b | |
| 15. a | 30. a | 45. a | 60. a | 75. d | 90. d | 105. c | |

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HISTORY BEFORE 1857

1. Islam reached Pakistan from:
 - (a) North
 - (b) South
 - (c) Northeast
 - (d) North & South
2. The first Muslim invasion of India was led by:
 - (a) Mahmud of Ghazni
 - (b) Muhammad Ghori
 - (c) Muhammad-bin-Qasim
 - (d) None of these
3. The Arab conquest of Sindh took place in:
 - (a) 712 A.D.
 - (b) 740 A.D.
 - (c) 729 A.D.
 - (d) 719 A.D.
4. Muhammad Bin Qasim arrived in sub continent and established and controlled the Indus Valley as far north as:
 - (a) Mithan Kot
 - (b) Multan
 - (c) Bahawalpur
 - (d) D.G. Khan
5. In the 11th century the Turkish rulers of Afghanistan began the Islamic conquest of India from the:
 - (a) northeast
 - (b) north
 - (c) northwest
 - (d) west
6. Who made Ghandara, Punjab, Sindh and Balochistan integral part of the Ghaznavi Empire?
 - (a) Mahmood of Ghazni
 - (b) Haroon-ur-Rasheed
 - (c) Qutb-ud-Din Aibak
 - (d) none of them
7. Which city Ghaznavids developed as their centre of Islamic Culture?
 - (a) Delhi
 - (b) Amritsar
 - (c) Lahore
 - (d) Peshawar
8. The Ghaznavi Kingdom was overthrown near the end of 12th Century by the:
 - (a) Ghorids
 - (b) Ghaznavids
 - (c) Mughals
 - (d) none of them
9. Which of the following battles was fought in 1192 A.D.?
 - (a) First Battle of Tarain
 - (b) Second Battle of Tarain
 - (c) Battle of Talikota
 - (d) None of these
10. Tamerlane the great Turkish conqueror who had his capital at Samarkand, penetrated India soon after in 1398-9 and sacked:
 - (a) Calcutta
 - (b) Lahore
 - (c) Delhi
 - (d) none of them
11. Mohenjodaro is also known as:
 - (a) Mound of the Great
 - (b) Mound of the Survivors
 - (c) Mound of the Dead
 - (d) None of these
12. Muhammad Bin Qasim, the first Muslim Commander entered India as conqueror in
 - (a) 712
 - (b) 713
 - (c) 714
 - (d) 715
13. Timur invaded India during the reign of:
 - (a) Alauddin Khilji
 - (b) Bahlol Lodi
 - (c) Firoz Tughlaq
 - (d) Nasiruddin Mehmud
14. Seventeenth attack of Sultan Muhammad Ghazni on India was took place in
 - (a) 1023
 - (b) 1027
 - (c) 1024
 - (d) 1025
15. Somnat temple was destroyed by Muhammad Ghazni in
 - (a) 1024
 - (b) 1026
 - (c) 1025
 - (d) 1027
16. Sultan Mohammed Ghori defeated Prithvi Raj at the second battle of Tarain in
 - (a) 1192
 - (b) 1190
 - (c) 1191
 - (d) 1194
17. First Islamic state was established in India in
 - (a) 1206
 - (b) 1196
 - (c) 1198
 - (d) 1199
18. The slave Dynasty was founded in India in
 - (a) 1206
 - (b) 1196
 - (c) 1198
 - (d) 1199
19. Qatub-u-din Aibek became the first ruler of Islamic state of India in
 - (a) 1206
 - (b) 1196
 - (c) 1198
 - (d) 1199
20. Qatub-u-Din Aibek died during playing
 - (a) Hockey
 - (b) Polo
 - (c) Cricket
 - (d) Football
21. Who was the first woman ruler of Delhi?
 - (a) Chand Bibi
 - (b) Noor Jahan
 - (c) Razia Sultana
 - (d) Lakashmi bai
22. Qatub-u-Din Aibek died in
 - (a) 1210
 - (b) 1216

- (c)1207 (d) 1209
23. Slave Dynasty in India was ended in
(a) 1290 (b) 1234
(c)1323 (d) 1245
24. The Khilji Dynasty was founded in India in
(a) 1245 (b) 1278
(c)1290 (d) 1298
25. Khilji Dynasty in India was ended in
(a) 1298 (b) 1278
(c)1320 (d) 1326
26. The Thughlaq Dynasty was founded in India in
(a) 1298 (b) 1278
(c)1320 (d) 1326
27. Suddat Dynasty was founded in India in
(a) 1414 (b) 1412
(c)1415 (d) 1634
28. The Delhi Sultanate virtually ended due to the invasion of:
(a) Chengiz Khan (b) Babar
(c)Nadir Shah (d) None of these
29. Thughlaq Dynasty in India was ended in
(a) 1414 (b) 1412
(c)1415 (d) 1634
30. Suddat Dynasty in India was ended in
(a) 1442 (b) 1445
(c)1451 (d) 1456
31. The Lodhi Dynasty was founded in India in
(a) 1442 (b) 1445
(c)1451 (d) 1456
32. The Lodhi Dynasty was ended in
(a) 1442 (b) 1445
(c)1526 (d) 1456
33. Who was the last ruler of Lodi dynasty?
(a) Bahlol Lodi
(b) Daulat Khan Lodi
(c)Ibrahim Lodi
(d) Sikandar Lodi
34. First Battle of Panipat fought was in
(a) 1523 (b) 1524
(c)1526 (d) 1532
35. Babur defeated Ibrahim Lodhi in:
(a) 1523 (b) 1524
(c)1526 (d) 1532
36. Mughal dynasty was founded by Babur in the year:
(a) 1523 (b) 1524
(c)1526 (d) 1532
37. Babar came to India originally from:
(a) Ferghana (b) Khiva
(c)Khorasan (d) Seistan
38. Death of Babur and accession of Humayun was took place in
(a) 1527 (b) 1539
(c)1530 (d) 1528
39. Sher Shah Suri defeated Humayun and became India's emperor
(a) 1540 (b) 1542
(c)1546 (d) 1547
49. When was the second battle of Panipat fought?
(a) 1191 (b) 1540
(c) 1556 (d) 1757
41. The first fort which the British constructed in India was:
(a) Hooghly Fort
(b) St. George Fort
(c)Agra Fort
(d) St. David Fort
42. Shalimar Bagh was constructed by Shahjahan
(a) 1640 (b) 1642
(c)1634 (d) 1638
43. Construction of Taj Mahal was completed in
(a) 1640 (b) 1647
(c)1634 (d) 1638
44. Construction of Badshahi Mosque in Lahore was completed in
(a) 1674 (b) 1763
(c)1666 (d) 1757
45. Shah Waliullah was born in
(a) 1674 (b) 1703
(c)1666 (d) 1707
46. Who was the last Mughal emperor to sit on the peacock throne?
(a) Bahadur Shah Zafar
(b) Aurangzeb
(c)Muhammad Shah
(d) Shah Alam II
47. Who built the mausoleum of Jahangir and where?
(a) Nur Jahan at Lahore
(b) Shahjahan at Agra
(c)Shahjahan at Delhi
(d) Nur Jahan at Fatehpur Sikri
48. The Peacock throne was made for:
(a) Jahangir (b) Akbar
(c)Shahjahan (d) Aurangzeb
49. Death of Aurangzeb:
(a) 1674 (b) 1703
(c)1666 (d) 1707
50. Battle of Plassey was fought in
(a) 1674 (b) 1757
(c)1666 (d) 1707
51. Third Battle of Panipat was fought in:
(a) 1763 (b) 1765
(c)1761 (d) 1764
52. Battle of Buxar was fought between Britishers and Mir Qasim
(a) 1763 (b) 1765
(c)1761 (d) 1764
53. Syed Ahmed Shaheed was born in:
(a) 1786 (b) 1767
(c)1789 (d) 1777
54. Death of Tipu Sultan was in:
(a) 1799 (b) 1789
(c)1800 (d) 1803
55. Fourth Mysore War:
(a) 1799 (b) 1789
(c)1800 (d) 1803

56. Sir Syed Ahmad Khan was born
(a) 1817 (b) 1876
(c) 1813 (d) 1823
57. Sher Shah's real name was:
(a) Hemu (b) Faizi
(c) Bahadur (d) Farid
58. Din-e-Ilahi was founded by Akbar in:
(a) 1567 (b) 1568
(c) 1582 (d) 1560
59. East India Company established in:
(a) 1578 (b) 1614
(c) 1600 (d) 1609
60. During the Mughal period which one of the following traders first came to India?
(a) Portuguese (b) Dutch
(c) Danish (d) English
61. Syed Ahmad Shaheed was martyred at Balakot in:
(a) 1843 (b) 1831
(c) 1832 (d) 1837
62. Sayyid-ul-Akhbar started by Sayyid Muhammad Khan:
(a) 1832 (b) 1837
(c) 1834 (d) 1836
63. Hazrat Mujadid Alf Sani was born in:
(a) 1453 (b) 1455
(c) 1564 (d) 1578
64. Humayun recaptured the throne of Delhi in:
(a) 1493 (b) 1555
(c) 1545 (d) 1548
65. Battle of Haldighati was fought in:
(a) 1822 (b) 1566
(c) 1576 (d) 1568
66. First edition of Asar-us-Sanadid was published in:
(a) 1846 (b) 1845
(c) 1848 (d) 1849
67. British Government sold Kashmir to Galab Singh in:
(a) 1846 (b) 1845
(c) 1848 (d) 1849
68. East India Company occupied Punjab in:
(a) 1846 (b) 1845
(c) 1848 (d) 1849
69. Nadir Shah invaded India during the reign of:
(a) Shah Alam
(b) Bahadur Shah
(c) Muhammed Shah
(d) Farrukhsiyar
70. The coin *rupia* was first issued by:
(a) Sher Shah Suri
(b) Alauddin Khilji
(c) Akbar
(d) Muhammad-bin-Tughlaq
71. Who was the founder of Faraizi Movement?
(a) Shah Ismail
(b) Haji Shariat Ullah
(c) Syed Ahmad Shaheed
(d) Shah Wali Ullah
72. The tomb of Babar is at:
(a) Lahore (b) Kabul
(c) Sasaram (d) Sikandra
73. The first census was conducted in India at the time of:
(a) Lord Dufferin (b) Lord Lytton
(c) Lord Mayo (d) Lord Ripon
74. When did Vasco da Gama come to India?
(a) 1492 (b) 1498
(c) 1398 (d) 1542
75. Mujahideen Movement was launched under the leadership of:
(a) Haji Shariat Ullah
(b) Syed Ahmad Shaheed
(c) Shah Ismail
(d) Shah Wali Ullah
76. Syed Ahmad Shaheed along with Shah Ismail was martyred in a battle with Sikhs at:
(a) Panipat (b) Pathankot
(c) Balakot (d) Agra
77. Syed Ahmad Shaheed and Shah Ismail were martyred in:
(a) 1825 (b) 1815
(c) 1830 (d) 1831
78. The founder of Mughal Empire was:
(a) Akbar (b) Babur
(c) Humayun (d) Tamur
79. Sher Shah Suri ousted Humayun and ruled the India until his death in:
(a) 1539 (b) 1545
(c) 1445 (d) 1345
80. Babar raided the Punjab from Afghanistan and finally defeated the last of the Delhi sultans, the Lodhis, at the first battle of Panipat in:
(a) 1526 (b) 1556
(c) 1426 (d) 1326
81. In 1530 Babar was succeeded by:
(a) Sher Shah Suri (b) Akbar
(c) Humayun (d) Shah Jehan
82. Humayun was ousted by:
(a) Humayun (b) Sher Shah Suri
(c) Shah Jehan (d) none of them
83. Humayun returned from exile in Persia and regained the throne in:
(a) 1555 (b) 1854
(c) 1454 (d) 1754
84. Who Mughal emperor died in 1556 after falling down his library stairs?
(a) Akbar (b) Humayun
(c) Babar (d) Shah Jehan
85. Akbar the great was a great patron of:
(a) Mughal art
(b) Music
(c) Literature
(d) Mughal Art and Literature
86. Mughal art and architecture reached its height under Akbar's son, Jahangir and grandson:
(a) Akbar (b) Babar
(c) Shah Jahan (d) Sher Shah Suri
87. Name the Mughal emperors who left a legacy

of magnificent mosques palaces, forts and gardens embellished with luxurious and delicate decorations?

- (a) Jahangir (b) Shah Jehan
- (c) both a & b (d) not a nor b

88. When Nadir Shah of Persia invaded the subcontinent and sacked Delhi?

- (a) 1439 (b) 1739
- (c) 1639 (d) 1839

89. The British began to come in subcontinent in _____ century.

- (a) 16th (b) 17th
- (c) 15th (d) 14th

90. The battle of Plassey was fought in:

- (a) 1657 (b) 1857
- (c) 1557 (d) 1757

91. When War of Independence was fought?

- (a) 1757 (b) 1657
- (c) 1857 (d) 1457

92. When the British government assume sovereignty over the lands of British East India Company?

- (a) 1357 (b) 1857
- (c) 1457 (d) 1858

93. Which of the following king has introduced Land Revenue system in subcontinent?

- (a) Akbar (b) Babar
- (c) Sher Shah Suri (d) Aurangzeb

94. Name the king whose revenue minister was Todar Mal?

- (a) Akbar
- (b) Babur
- (c) Shah Jehan
- (d) Bahadur Shah Zafar

95. In which battle English won and later captured Lahore?

- (a) Battle of Sabroan
- (b) War of Intendancy
- (c) Battle of Punjab
- (d) Battle of Lahore

96. After the conquest of Punjab, Punjab Britishers constituted a three member Board of Administration for governing the Punjab. Indicate who was not the member among the followings:

- (A) Henry Lawrence
- (B) John Lawrence
- (C) Charles Mansel
- (D) Robert Montgomery

97. Indian Railway started operation:

- (A) 1847 (B) 1849
- (C) 1853 (D) 1861

98. Indian Rebellion of 1857 (War of independence) began on 10th May from the town of:

- (a) Jhansi (b) Gwalior
- (c) Meerut (d) Lucknow

99. Battle of Pallasay was fought between Siraj-ud-duala and:

- (a) Lord Clive (b) Lord Canning
- (c) Warren Hasten (d) Shah Alam

100. Durand Line Treaty was signed by a British man Durand and King of Afghanistan _____ in 1893

- (a) Amir Aman Ullah
- (b) Abdul Rehman
- (c) Noor Ahmad
- (d) Ahmad Shah Abdali

Answer Key

| | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|--------|
| 1. d | 14. b | 27. a | 49. c | 53. a | 66. a | 79. b | 92. d |
| 2. c | 15. b | 28. b | 41. b | 54. a | 67. a | 80. a | 93. c |
| 3. a | 16. a | 29. a | 42. b | 55. a | 68. d | 81. c | 94. a |
| 4. b | 17. a | 30. c | 43. b | 56. a | 69. c | 82. b | 95. a |
| 5. c | 18. a | 31. c | 44. a | 57. d | 70. a | 83. a | 96. d |
| 6. a | 19. a | 32. c | 45. b | 58. c | 71. b | 84. b | 97. c |
| 7. c | 20. b | 33. c | 46. c | 59. c | 72. b | 85. d | 98. c |
| 8. a | 21. c | 34. c | 47. a | 60. a | 73. c | 86. c | 99. a |
| 9. b | 22. a | 35. c | 48. c | 61. b | 74. b | 87. b | 100. b |
| 10. c | 23. a | 36. c | 49. d | 62. b | 75. b | 88. b | |
| 11. c | 24. c | 37. a | 50. b | 63. c | 76. c | 89. b | |
| 12. a | 25. c | 38. c | 51. c | 64. b | 77. d | 90. d | |
| 13. d | 26. c | 39. a | 52. d | 65. c | 78. b | 91. c | |



HISTORY AFTER 1857

1. Where, during the war of Independence, Sir Syed Ahmad Khan was working?
 - (a) Delhi
 - (b) Aligarh
 - (c) Bijnaur
 - (d) Lacknow
2. Which factor became the immediate cause of Sir Syed Ahmad Khan's demand of Separate Electorate for the Indian Muslims:
 - (a) Urdu Hindi controversy in 1867,
 - (b) No Muslim was elected in the legislative council's election in 1892
 - (c) Arya Samaj launched a campaign for the protection of cows in 1893,
 - (d) British Indian government announced maximum representation of natives in the legislative council in the third constitutional reform package.
3. In which book Sir Syed Ahmad Khan mentioned similarities between Islam and Christianity?
 - (a) *Ahkam-e-Taum*
 - (b) *Tabaeen al Kalam*
 - (c) *Comparison*
 - (d) none of them
4. Who wrote *Loyal Mohammedans of India*?
 - (a) Hali
 - (b) Nazir Ahmad
 - (c) Sharar
 - (d) Sir Syed Ahmad Khan
5. In 1859 Sir Syed started a school at:
 - (a) Bijnor
 - (b) Aligarh
 - (c) Muradabad
 - (d) Ghazipur
3. In 1862 Sir Syed opened a school at:
 - (a) Ghazipur
 - (b) Aligarh
 - (c) Muradabad
 - (d) Bijnor
7. Where Sir Syed founded a scientific society in 1864?
 - (a) Bijnor
 - (b) Ghazipur
 - (c) Aligarh
 - (d) Muradabad
8. The function of scientific society was:
 - (a) translation of scientific work in Urdu
 - (b) translation of European literature in Urdu
 - (c) translation of Muslim scientists work in Urdu
 - (d) translation of modern work in Urdu
9. When M.A.O. High School was elevated to the status of College?
 - (a) 1876
 - (b) 1867
 - (c) 1877
 - (d) 1875
10. When Aligarh College was upgraded to the status of University?
 - (a) 1925
 - (b) 1920
 - (c) 1923
 - (d) 1922
11. On seeing the attitude of Congress Sir Syed Ahmad Khan advised the Muslims to:
 - (a) to form their own party
 - (b) to fight against Congress
 - (c) not to join it
 - (d) to fight within Congress
12. Sir Syed advised the Muslims to concentrate on:
 - (a) politics
 - (b) education
 - (c) education & economics
 - (d) economics
13. In *Tahzib-ul-Akhlaq* Sir Syed described ethical aspects of the:
 - (a) Indian culture
 - (b) Arabian culture
 - (c) Muslim culture
 - (d) Persian & Arabian culture
14. For the protection of Urdu Sir Syed founded:
 - (a) *Anjuman-e-Tarakki-e-Urdu*
 - (b) *Tehzeeb-ul-Akhlaq*
 - (c) Urdu Protection Society
 - (d) none of them
15. In his earlier Sir Syed was in favour of:
 - (a) Hindu Muslim British unity
 - (b) separate electorate
 - (c) Hindu Muslim unity
 - (d) Muslim unity
16. Two Nation Theory was introduced by:
 - (a) Allama Iqbal
 - (b) Sir Syed
 - (c) Quad-i-Azam
 - (d) Nawab Salim-ul-Mulk
17. When Indian Patriotic Association was found?
 - (a) 1661
 - (b) 1761
 - (c) 1841
 - (d) 1888
18. Who founded the Indian Patriotic Association?
 - (a) Sir Syed
 - (b) Nawab Salim-ul-Mulk
 - (c) Nawab Waqar-ul-Mulk
 - (d) none of them
19. In 1889 at the platform of Congress a resolution on the expansion and reform of legislative councils came up for discussion, some Muslims delegates demanded that the

- number of Muslims members in the Imperial and provincial councils should always be equal to that of the Hindus. The refusal of the Congress to accept this principle resulted in the:
- (a) withdrawal of many Muslims from Congress
(b) partition of Congress
(c) election of Congress
(d) none of them
20. In 1889, to make known to the British Government the feelings of the Muslim community about the question of representation which was to be dealt with in a bill intended to be introduced in parliament. Who did this through a petition signed by nearly 40,000 Muslims inhabitants of about 70 cities and towns and submitted to the House of Commons through Richard Temple?
- (a) Nawab Salim-ul-Mulk
(b) Nawab Waqar-ul-Mulk
(c) Sir Syed Ahmad Khan
(d) Nawab Saleem-ullah
21. Which Act opened the door for the election of politicians to the Imperial as well as provincial councils?
- (a) Indian Act, 1832
(b) Indian Council Act, 1892
(c) Indian Act, 1935
(d) Indian Act, 1940
22. The Muslims were not happy with the 1892 Act because due to this Act:
- (a) The British influence was to increase
(b) Muslims rights were crushed
(c) all of them
(d) The Hindu influence was to increase
23. Who started educational mission for Muslims in Bengal?
- (a) Nawab Saleem Ullah
(b) Nawab Abdul Latif
(c) Nawab Wajee Ullah
(d) Nawab Abdul Majeed
24. When Nawab Abdul Latif founded the Muhammadan Literary Society of Calcutta?
- (a) June, 1863 (b) April, 1863
(c) May, 1863 (d) July, 1863
25. What were the objects of Muhammadan Literary Society?
- (a) Awakening in the Muslims a desired to interest themselves in western learning and progress
(b) Bringing to the notice of the rulers the requirements of the Muslims in regard to education, legislation and other cognate objects
(c) both of them
(d) none of them
26. Which organisation of the Muslims regarded India as Dar-ul-Islam?
- (a) Muslim League
(b) Muhammadan Literary Society
(c) Muslim Literary Society
(d) Muslim Literary Foundation
27. Which movement Raja Ram Mohan Roy founded?
- (a) Brahma Samaj (b) Sawadeshi
(c) Arya Samaj (d) none of them
28. What was the aim of Brahma Samaj?
- (a) Reforms in India
(b) Reforms in Society
(c) Reforms in Politics
(d) Reforms in Hinduism
29. As a reaction of foreign influence which Hindu organisation came into existence?
- (a) The Arya Samaj (b) Brahma Samaj
(c) both of them (d) none of them
30. The Arya Samaj was anti:
- (a) Sikh (b) Christian
(c) Muslim (d) all of them
31. Who founded Arya Samaj?
- (a) Ambedkar
(b) Raja Ram Mohan
(c) Dayananda Saraswati
(d) Ram Gopal Acharya
32. When Arya Samaj was founded?
- (a) 1876 (b) 1875
(c) 1880 (d) 1884
33. Arya Samaj targeted mainly:
- (a) Islam (b) Christianity
(c) both a & b (d) all religion
34. Which Hindu movement called the Hindus back to the ancient faith and "stirred them up to vehement opposition" to Christianity and Islam?
- (a) Arya Samaj (b) Brahma Samaj
(c) Soudeshi Samaj (d) Anan Samaj
35. Who was the founder of Shuddhi movement?
- (a) Dayananda Saraswati
(b) Ambedkar
(c) Moti Lal
(d) Krishan Gopal
36. The aim of Shuddi movement was the conversion of non-Hindus in Hindus, particularly:
- (a) Anglo-Indians of Hindu origin
(b) Muslims of Hindu origin
(c) Christians of Hindu origin
(d) Budhs of Hindu origin
37. Which movement evoked anti-Muslim feelings among the Hindus and proved to be one of the major causes of Hindu-Muslim riots in the subcontinent?
- (a) Cow protection society
(b) Arya Samaj
(c) Congress
(d) Brahm Samaj
38. Indian Association is considered as the forerunner of the:
- (a) Muslim League
(b) Indian National Congress
(c) Muslim League & Congress
(d) Central Muhammadan Association

39. Name the Muslim political organisation which came into being in Calcutta just one year after the establishment of the Indian Association?
 (a) Muslim League
 (b) Anglo-Indian Association
 (c) The Central National Muhammad Association
 (d) Urdu Defence Association
40. When the Central National Muhammadan Association was founded?
 (a) 1877 (b) 1870
 (c) 1880 (d) 1882
41. The Central National Muhammad Association was founded by:
 (a) Sir Syed
 (b) Waqar-ul-Mulk
 (c) Nawab Saleem Ullah
 (d) Syed Amir Ali
42. The aim of The Central National Muhammadan Association was:
 (a) Political regeneration of the Muslims
 (b) moral revival of Muslims
 (c) to obtain from the government a recognition of their just and reasonable claims
 (d) all of them
43. Which of the following organizations had established 'Sind Madrasat-ul-Islam Karachi' in 1886:
 (a) Central Muhammadan Association
 (b) Muhammadan Educational Conference
 (c) Anjuman Himayat-i-Islam
 (d) Dar-ul-Ulum-i-Islamia
44. Which organisation is considered the first Muslim political body organised to represent the Muslims of the subcontinent as a whole?
 (a) The Central National Muhammadan Association
 (b) Muslim League
 (c) Urdu Defence Association
 (d) Khalifat Movement
45. When the Vernacular Press Act passed?
 (a) 1880 (b) 1875
 (c) 1878 (d) 1882
46. The Vernacular Press Act imposed restrictions on:
 (a) Urdu languages press
 (b) Indian languages press only
 (c) English & Urdu press
 (d) all newspapers
47. Lord Ripon's Government repealed the Vernacular Press Act in:
 (a) 1880 (b) 1882
 (c) 1885 (d) 1886
48. Which bill aroused strong controversy in India and greatly stirred up race hatred between the rulers and the ruled?
 (a) Indian Act 1882 bill
 (b) Indian Act 1919 bill
 (c) Vernacular press bill
 (d) Ilbert Bill
49. When Indian National Congress was founded?
 (a) 1880 (b) 1887
 (c) 1883 (d) 1885
50. The Indian National Congress was founded on the initiative of:
 (a) Gandhi (b) Jinnah
 (c) A.O. Hume (d) Shakespeare
51. Who was A.O. Hume?
 (a) A retired member of Civil Service
 (b) Governor-General of India
 (c) Viceroy of India
 (d) Member of British Parliament
52. When Anthony MacDonnell conceded the Hindu demand and issued a resolution declaring that Hindi written in the Nagri script would enjoy equal status with Urdu as the language of law courts in the provinces and that in the future only such persons would be appointed, except in a purely English office, to Government jobs who knew Urdu as well as Hindi?
 (a) April 1901 (b) December 1900
 (c) April 1902 (d) April 1900
53. When Urdu Defence Association was founded?
 (a) April 1902 (b) August 1905
 (c) August 1900 (d) April 1900
54. Where Urdu Defence Association was found?
 (a) Delhi (b) Banaras
 (c) Calcutta (d) Lucknow
55. Who was the president of Urdu Defence Association?
 (a) Waqar-ul-Mulk
 (b) Mohsin-ul-Mulk
 (c) Nawab Salim Ullah
 (d) Sir Syed
56. When Sir Syed convinced that Hindus can never be friendly with the Muslims
 (a) when congress was formed
 (b) when government declared Nagri script as official
 (c) when government declared Hindi as official language
 (d) when government declared Hindi as court language
57. When Sir Syed expressed that Hindus and Muslims are two separate nations for the first time?
 (a) 1868 (b) 1867
 (c) 1870 (d) 1865
58. When Muslim League demanded constitutional reforms in India?
 (a) 1928 (b) 1929
 (c) 1930 (d) 1927
59. Which point awakened the Muslims of India politically?
 (a) demand of constitutional reforms by Muslim League
 (b) formation of congress
 (c) Hindi-Urdu controversy

- (d) formation of Muslim League
60. During Pakistan Movement from where a secret newspaper Sada-i-Pakistan was published?
 (a) Punjab (b) Calcutta
 (c) NWFP (d) Sindh
61. Which province is called Bab-ul-Islam?
 (a) Punjab
 (b) Sindh
 (c) East Bengal
 (d) Khyber Pakhtunehwa
62. When the elections were held under Act, 1935?
 (a) 1936-37 (b) 1935-36
 (c) 1936 (d) 1937
63. How many percentage of seats Congress win in election 1936-37?
 (a) less than 40 per cent
 (b) less than 50 per cent
 (c) less than 60 per cent
 (d) less than 58 per cent
64. In election 1936-37 out of 491 Muslim constituencies, the Congress captured 26 and the League:
 (a) 100 (b) 90
 (c) 106 (d) 108
65. In election 1936-37 the Congress gained clear majorities in five provinces, namely, Madras, United Provinces, Central Provinces, Bihar and:
 (a) Sindh (b) Orissa
 (c) NWFP (d) Assam
66. After the election of 1936-37, Congress with the help of minority groups also formed ministries in:
 (a) Bombay & North-Western Frontier Province
 (b) Punjab
 (c) United Provinces
 (d) Bombay
67. As a result of election 1936-37, out of eleven provinces congress formed ministries in:
 (a) seven (b) six
 (c) five (d) nine
68. When Muslim League changed its creed to "full independence in the form of a federation of free democratic states in which the rights and interests of the Muslims and other minorities are adequately and effectively safeguarded in the constitution"?
 (a) Lucknow session of 1938
 (b) Lucknow session of 1937
 (c) Lucknow session of 1940
 (d) after elections of 1936-37
69. When Congress formed ministries in provinces of India?
 (a) 1938 (b) 1936
 (c) 1937 (d) 1939
70. The legislative assemblies of the Congress-governed provinces proceedings were opened with a recital of:
 (a) Nya Shiwala (b) Vande Mataram
 (c) Rig veda (d) Maha Bharat
71. Vande Mataram was accepted by the Congress as a:
 (a) Hindu national song
 (b) national slogan
 (c) national song
 (d) patriotic song
72. What was the name of report prepared by committee appointed by the League, under the presidentship of Raja Muhammad Mehdi of Pirpur, to inquire into the Muslim grievances in the Congress-governed provinces?
 (a) Ranipur report (b) Pirpur Report
 (c) Mehdi Report (d) League Report
73. When Congress quit ministries?
 (a) November 1939 (b) December 1939
 (c) August 1935 (d) October 1940
74. In which pretext congress quit ministries?
 (a) Viceroy had proclaimed a state of war against Germany
 (b) In spite of Congress' opposition Viceroy had proclaimed a state of war against Germany
 (c) Viceroy had proclaimed a state of war against Germany without consulting congress ministries
 (d) None of them
75. When Muslims celebrated 'Deliverance Day' throughout the subcontinent?
 (a) 22 December 1939
 (b) 20 December 1940
 (c) 22 October 1935
 (d) 25 August 1942
76. Why Muslims observed 'Deliverance Day'?
 (a) end of world war
 (b) end of congress ministries
 (c) both of them
 (d) none of them
77. When Chaudhuri Rehmat Ali issued an appeal for the partition of sub-continent under the title "Now or Never"?
 (a) 1928 (b) 1930
 (c) 1925 (d) 1933
78. In March 1940 the League held its annual session at:
 (a) Karachi (b) Lahore
 (c) Delhi (d) Amritsar
79. Who narrated the events of the last few months in an extempore speech on 22 March and presented his own solution of the Muslim problem at the Muslim Leagues session of 1940?
 (a) Quaid-e-Azam
 (b) Allama Iqbal
 (c) Liaqat Ali Khan
 (d) Chaudhary Rehmat Ali

80. Who presented Lahore resolution on 23 March 1940?
 (a) Allama-Iqbal (b) A.K. Fazl-ul-Haq
 (c) Liaqat Ali Khan (d) Quaid-e-Azam
81. In which resolution it was declared, "that no constitutional plan would be workable in this country or acceptable to the Muslims unless it is designed on the following basic principles, namely, that geographically contiguous units are demarcated into regions which should be so constituted, with such territorial readjustments as may be necessary, that the areas in which the Muslims are numerically in a majority as in North-Western and Eastern zones of India should be grouped to constitute independent states in which the constituent units shall be autonomous and sovereign?"
 (a) Lucknow Resolution
 (b) Bengal Resolution
 (c) Lahore Resolution
 (d) Delhi Resolution
82. Lahore Resolution is also known as:
 (a) Pakistan Resolution
 (b) Independence Resolution
 (c) League Resolution
 (d) None of them
83. The Lahore Resolution repudiated the unity of India and recommended the creation of independent Muslim states consisting of the Punjab, the North-West Frontier Province, Sind and Balochistan in the north-west and:
 (a) Bengal and Assam in the north-east
 (b) Bengal
 (c) Hyderabad
 (d) Assam and Hyderabad
84. Who was the first Muslim leader of U.P. which declared his support for the Lahore Resolution in 1940?
 (a) Chaudhri Rehmat Ali
 (b) Chaudhri Khaliq-uz-Zaman
 (c) Liaqat Ali Khan
 (d) Fazal-e-Haq
85. When Bengal was divided into two provinces?
 (a) 16 October, 1905
 (b) 15 December 1908
 (c) 16 September, 1906
 (d) 10 August 1909
86. Who divided Bengal into two provinces?
 (a) Lord Ripon
 (b) Viceroy Curzon
 (c) Lord Linlithgow
 (d) Sir James
87. Name the city which was the centre-point of agitation against the partition of Bengal?
 (a) Calcutta (b) Hyderabad
 (c) Lahore (d) Delhi
88. Which was the song adopted by Hindus in anti-partition of Bengal movement?
 (a) Maha Bharat (b) Nia Shiwala
 (c) Vande Mataram (d) None of them
89. Which movement the anti-partitionists of Bengal started?
 (a) Vidashi movement
 (b) Swadeshi movement
 (c) Quit India movement
 (d) Anti-British movement
90. Who agitated for the annulment of the partition of Bengal?
 (a) Hindus & Congress
 (b) Hindus
 (c) Congress
 (d) Congress & Sikhs
91. The partition of Bengal was annulled during the era of Lord Harding in:
 (a) 1909 (b) 1911
 (c) 1912 (d) 1913
92. When the delegation of Muslim leaders (Simla Deputation) met Viceroy?
 (a) 1904 (b) 1906
 (c) 1907 (d) 1909
93. Who led the Simla Deputation?
 (a) Sir Agha Khan
 (b) Allama Iqbal
 (c) Jinnah
 (d) Nawab Saleem-Ullah
94. What were the main demands of Simla Deputation?
 (a) Separate electorates
 (b) Quota in government services
 (c) Seats of Judges in Court for the Muslims
 (d) All of them
95. Simla Deputation also demanded the separate electorate for the Muslims:
 (a) with separate constituencies
 (b) with separate elections
 (c) with separate arrangements
 (d) with combine constituencies
96. When Muslims left the Congress and felt for their own political party?
 (a) at the formation of Muslim League
 (b) at the time of Sawadeshi movement
 (c) when Jinnah asked for it
 (d) at the time of Simla deputation
97. Who convened a meeting of the Muslim leaders after the meeting of the Educational Conference to discuss the possibilities of a Muslim political organization in India.
 (a) Waqar-ul-Mulk
 (b) Nawab Salim Ullah Khan
 (c) Sir Agha Khan
 (d) Salim-ul-Mulk
98. Who was the President of the meeting which thought for separate political party for Muslims?
 (a) Salim-ul-Mulk
 (b) Sir Agha Khan
 (c) Nawab Salim Ullah Khan
 (d) Nawab Waqar-ul-Mulk
99. Who presented a resolution for the formation for Muslims' political party?

- (a) Salim-ul-Mulk
(b) Sir Agha Khan
(c) Nawab Wiqar-ul-Mulk
(d) Nawab Salim Ullah Khan
100. For political party of Muslims, Nawab Salim Ullah Khan proposed the name:
(a) All India Muslim Confederacy
(b) All India Muslim Confederation
(c) All India Muslim Conference
(d) All India Muslim League
101. When All India Muslim League was formed?
(a) 30 December, 1906
(b) 28 October, 1905
(c) 25 September, 1907
(d) 29 August, 1909
102. Who was the first president of All India Muslim League?
(a) Nawab Saleem-Ullah
(b) Nawab Saeed-uz-Zaman
(c) Nawab Wiqar-ul-Mulk
(d) Sir Agha Khan
103. Who was the first secretary of All India Muslim League?
(a) Nawab Saeed-uz-Zaman
(b) Nawab Mohsin-ul-Mulk
(c) Nawab Wiqar-ul-Mulk
(d) Sir Agha Khan
104. What was the important feature of first session of All India Muslim League?
(a) Constitution of League was presented
(b) The Constitution of the League was approved
(c) Both of them
(d) None of them
105. Name the organisation set up by Syed Amir Ali in London?
(a) Indian Muhammadan Association
(b) Muhammadan Association
(c) Anglo Indian Muhammadad Association
(d) British Muhammadan Association
106. What was the original objective for the formation of Muslim League?
(a) To gain independence
(b) To safeguard of the interests and rights of the Muslims of Indian
(c) To represent Muslims
(d) To counter Congress
107. When the demand of separate electorate by Muslim League?
(a) 1905 (b) 1907
(c) 1903 (d) 1909
108. The demand of separate electorate was incorporated:
(a) Chamesfort Reforms
(b) Minto-Morley Reforms
(c) India Act 1935
(d) India Act 1919
109. What was the purpose of Hindus Mahasbha?
(a) Elimination of Sikhs
(b) Elimination of Sikhs & Muslims
(c) Elimination of the Muslims
(d) To gain independence
110. When Muslim League demand for principle of self-rule for India?
(a) 1909 (b) 1914
(c) 1915 (d) 1913
111. At which point Congress and Muslim League came closer?
(a) Indian Act 1919
(b) Lucknow Pact 1916
(c) Minto-Morley Reforms
(d) Election of 1936-37
112. Who was called the "True Ambassador of Hindu-Muslim unity"?
(a) Allama Iqbal
(b) Sir Sayyed
(c) Abu-al-Kalam Azad
(d) Quaid-e-Azam
113. When Congress and Muslim League made agreement on constitutional reforms?
(a) 1915 (b) 1917
(c) 1919 (d) 1916
114. The agreement of constitutional reforms reached by Muslim and Congress are called:
(a) Delhi Pact
(b) Congress-League Pact
(c) Lucknow Pact
(d) Reforms Pact
115. Name the pact in which the Muslims and Hindus agreed for separate electorate for Muslims?
(a) Congress-League Pact
(b) Reforms Pact
(c) Delhi Pact
(d) Lucknow Pact
116. In which agreement Congress agreed separate electorate for Muslims?
(a) Lakhnow Pact (b) Delhi Pact
(c) Reforms Pact (d) Reforms Pact
117. On 13 April, 1919, a large crowd of about six to ten thousand gathered in the Jallianwala Bagh at Amritsar to voice their protest. Against whom they were protesting?
(a) British Government
(b) Viceroy
(c) Governor General
(d) Rowlatt Act
118. When All India Muslim League was divided in to two factions in 1927; one was headed by Quaid-i-Azam while the other was:
(a) Allama Iqbal
(b) Maulana Muhammad Ali Jauhar
(c) Sir Muhammad Shafi
(d) Hasrat Mohani
119. Who is known as the grand old man of the North-West Frontier Province?
(a) Muhammad Khan
(b) Nawab Ahmad Ali Khan
(c) Sahibzada Abdul Qayyum
(d) Chaudhary Ahmad Raza
120. Name the educational institution founded by Sahibzada Abdul Qayyum?

- (a) Peshawar College
(b) Peshawar School
(c) Islamia School, Peshawar
(d) Islamia College, Peshawar
121. When Islamia College, Peshawar was founded?
(a) 1907 (b) 1913
(c) 1909 (d) 1905
122. When Khalifat Day was observed in sub-continent?
(a) 27 October, 1919
(b) 25 October, 1917
(c) 23 December, 1915
(d) 25 September, 1905
123. In January 1920 a deputation was sent to the Viceroy to represent the Muslim demand in respect of the Khalifat. It visited England and France. Who was its head?
(a) Shaikat Ali (b) Muhammad Ali
(c) Rehmat Ali (d) Quaid-e-Azam
124. Which was the first biggest mass movement against British rule in India in which Hindu and Muslims were united?
(a) Sawadeshi movement
(b) Quit India Movement
(c) Non-cooperation movement
(d) Independence movement
125. Which movement was the by-product of the Khalifat movement?
(a) Independence Movement
(b) Hijrat
(c) Boycott Movement
(d) None of them
126. When some 18,000 Muslims mostly from Sind, the Punjab and the North-West Frontier Province, left their homes to seek refuge in Afghanistan?
(a) August 1921 (b) August 1919
(c) August 1917 (d) August 1915
127. Who called off non-cooperation movement?
(a) Nehru (b) Gandhi
(c) Jinnah (d) Patel
128. After which incidence Gandhi called off non-cooperation movement?
(a) Chauri Chaura
(b) Jalianwala Bagh
(c) Arrest of Ghandhi
(d) None of them
129. In which incidence 22 police men had been shut up in a house and burnt alive by a frenzied mob?
(a) Arrest of Nehru (b) Chauri Chaura
(c) Arrest of Patel (d) Jalianwala Bagh
130. The Anarchical and Revolutionary Crimes Act was popularly known as:
(a) Rowlatt Bill (b) India Act 1919
(c) Rowlatt Act (d) India Act 1935
131. Under the Montague Chelmsford Reforms: 1919 legislature was:
(a) Unicameral (b) Bicameral
- (c) Tricameral (d) None of them
132. Under the Act of 1919 Muslims were given the right of separate electorate. Which nation was also given this right under this Act?
(a) Sikh
(b) Sikh & Anglo-Indian
(c) Anglo-Indian
(d) Sikh & Parsi
133. After defeat of Turkey the Muslims of the Sub-Continent sent a medical mission to help the sick and wounded Turkish soldiers. Who was the head of this mission?
(a) Dr. A. Rehman
(b) Dr. Ahmad Ali
(c) Dr. Hassan Rehman
(d) Dr. M.A. Ansari
134. Name the organisation which was founded for the maintenance of the integrity of the Turkish empire, so that the holy places situated therein continued to remain under Turkish custody?
(a) Anjuman-e-Khuddam-i-Ka'bah
(b) Anjuman-e-Khuddam-i-Millat
(c) Anjuman-e-Khuddam-i-Khalifat
(d) None of them
135. When the municipal authorities of Cawnpur demolished a portion of a city mosque to widen the street in spite of the strong protests of the local Muslim population.
(a) August 1910 (b) May 1919
(c) September 1915 (d) July 1913
136. After the defeat of Turkey the califate system was in danger. In India a Khalifat Committee was setup for the help of Califat. Who was its secretary?
(a) Maulana Shaikat Ali
(b) Maulana Muhammad Ali
(c) Dr. M.H. Ansari
(d) Abu'al Kalam Azad
137. All Muslims of India strongly supported Khalifat Movement and Hindus:
(a) supported (b) opposed
(c) revolted (d) Kept silence
138. The Muslims and Hindus started non-cooperation movement for:
(a) Indian Independence
(b) Restoration of Caliphate
(c) Both a&b
(d) Expulsion of British
139. Under Gandhi Congress adopted the non-cooperation programme in a special session and it was confirmed later at Nagpur session in:
(a) December 1920 (b) July 1922
(c) December 1925 (d) May 1920
140. Who was the major Muslim Leader who strongly opposed non-cooperation programme?
(a) Allama Iqbal
(b) Quaid-i-Azam
(c) Abu'al Kalam Azad

- (d) Liaquat Ali Khan
141. Quaid-i-Azam resigned from Congress in 1920. He resigned from the Imperial Legislative Council in 1919 as a protest against:
- Mahatma Gandhi's call for Non Cooperation Movement,
 - The passage of the Rowlatt Act
 - Tragedy of the Jallianwala Bagh
 - Tragedy of the Kanpur Mosque
142. In 1919 the Khalifat Committee announced delegation to England to inform the British Government sentiment of Muslims under the leadership of:
- Maulana Shaukat Ali
 - Hasrat Mohani
 - Maulana Muhammad Ali Johar
 - Abu'al Kalam Azad
143. In Government of India Act, 1919 the structure of the Parliamentary form of Government was introduced. What was its point?
- Executive was not made responsible to the Legislature
 - Executive was made responsible to the Legislature
 - Executive was not made responsible to the Judiciary
 - None of them
144. Who started Home Rule Movement?
- Mrs. Annie Besant
 - B.G. Tilak
 - Both of them
 - None of them
145. In which Act the system of Dyarchy was introduced first time in India?
- Government of India Act, 1935
 - Government of India Act, 1905
 - Government of India Act, 1919
 - Government of India Act, 1908
146. Name the Hindu militant organisation which started at Banaras in 1923?
- Hindu Mahasabha
 - cow-slaughter committee
 - Hindu Wishwanath
 - none of them
147. Who was the leader of Mahasabha?
- Nehru
 - Pandit Madan Mohan Malaviya
 - Gandhi
 - Tilak
148. Hindu Mahasabha started as a socio-religious movement but soon became a full-fledged:
- revivalist party
 - terrorist party
 - political party
 - religious party
149. Who declared, "the future of the Hindu race of Hindustan and of Punjab rests on these four pillars: (1) Hindu Sangathan, (2) Hindu Raj, (3) Shuddhi of Muslims and (4) conquest and Shuddhi of Afghanistan and the Frontier. So long as the Hindu nation does not accomplish
- these four things, the safety of our children and great-grand-children will be ever in danger, and the safety of Hindu race will be impossible."
- Lala Hardyal
 - Pandit Madan Mohan
 - Gandhi
 - none of them
150. Which movement Muslims of India started as an answer to the Shuddhi and Sangathan?
- Tabligh movement
 - Jihad Movement
 - Tabligh & Tanzim
 - Tanzim Movement
151. On which pretext more Muslims were killed before 1947 than any other account?
- demand for homeland
 - cow-killing
 - forming the Muslim League
 - separating the Congress
152. Who recommended the constitutional problem of India should be discussed at a Round Table Conference?
- Minto Morley Report
 - Simon Commission
 - Cripps Plan
 - none of them
153. When the First Round Table Conference was held in London?
- 1930
 - 1935
 - 1940
 - 1950
154. What was the main recommendation of the First-Round Table Conference?
- transfer of power to Indian subjects
 - establishment of All India confederation
 - establishment of All India Federation
 - transfer of power to Indian political parties
155. Which movement pushed All India Muslim League into background?
- non-cooperation movement
 - Khalifat Movement
 - Quit India Movement
 - none of them
156. When All-Parties Muslim Conference was held?
- 31 December 1919 - 1st January, 1920
 - 31 December 1925 - 1st January, 1926
 - 31 December 1928 - 1st January, 1929
 - 31 December 1929 - 1st January, 1930
157. Who was the chairman of All Parties Muslim Conference?
- Jinnah
 - Ch. Rehmat Ali
 - Allama Iqbal
 - Agha Khan
158. The second Round Table Conference was held in:
- 1935-36
 - 1933-34
 - 1941-42
 - 1931-32
159. After the second Round Table Conference the British Government announced:
- Cvrlil Radcliffe Award

- (b) new constitution
(c) Communal Award
(d) dissolution of government
160. When Communal Award was announced?
(a) 1932 (b) 1929
(c) 1935 (d) 1938
161. The Communal Award scheme fixed the representation of various communities in the provincial legislatures. Separate electorates were retained and weightage was given to Muslims in Muslim minority provinces, to Europeans in Bengal and Assam, to the Sikhs in the Punjab and Khyber Pakhtunkhwa and to the Hindus in:
(a) Sindh (b) NWFP
(c) both of them (d) none of them
162. On the basis of report of the Joint Select Committee which Act the British Parliament passed?
(a) Government of India Act, 1935
(b) Government of India Act, 1936
(c) Government of India Act, 1934
(d) Government of India Act, 1938
163. The Government of India Act, 1935 provided for the creation of some new provinces. Name these provinces?
(a) Sindh & Orissa
(b) Sindh & Bengal
(c) Bengal & Khyber Pakhtunkhwa
(d) East Punjab & West Punjab
164. What was the most distinctive feature of the Act of 1935?
(a) safeguard the rights of minorities
(b) limiting the power of central legislative
(c) introduction of provincial autonomy
(d) all of them
165. Which Act provided provision of safeguards and protective armours for the minorities?
(a) The Government of India Act, 1919
(b) The Government of India Act, 1940
(c) The Government of India Act, 1935
(d) The Government of India Act, 1910
166. The Act of 1935 not only retained communal electorate but also enlarged its scope. Which minorities were given separate electorates?
(a) Anglo-Indians and the Indian Christians
(b) Sikhs & Christians
(c) Sikhs & Anglo-Indians
(d) Parsis & Anglo-Indians
167. Who said about the Act of 1935, "thoroughly rotten, fundamentally bad and totally unacceptable"?
(a) Allama Iqbal (b) Gandhi
(c) Quaid-e-Azam (d) Nehru
168. Who said about the Act of 1935, "a new chapter of slavery. It was a sort of machine with strong brakes and no engine".
(a) Quaid-e-Azam (b) Allama Iqbal
(c) Gandhi (d) Nehru
169. Three Round Table conferences (1930-32) at London were presided over by:
(a) Queen Victoria
(b) British Prime Minister Ramsay MacDonald
(c) Dr. Ambedkar
(d) None of these
170. In which plan a Constitutional body was offered to the Indian immediately after the World War I?
(a) August Offer (b) Cripps' Plan
(c) August Plan (d) none of them
171. On which ground Congress rejected the Cripps' Plan?
(a) because it did not give assurance that the Governor-General would act as a constitutional head
(b) because it gave more rights to the Muslims
(c) because Muslims could gain more power under this plan
(d) without any ground
172. Who rejected the Cripps' Plan because of the clause of non-accession of the provinces and the separate electorate system of the election of the members of the Constituent Assembly.
(a) Hindus (b) Sikhs
(c) Congress (d) all of them
173. Why Muslim League opposed the Cripps' Plan?
(a) because idea of Pakistan was rejected in the plan
(b) because Muslim League was not consulted
(c) because the proposals held out the prospects of a single Union of India
(d) Hindus were obliged in the Plan
174. After the failure of Cripps' Plan the passed:
(a) Agitation Resolution
(b) Quit India Resolution
(c) Freedom Resolution
(d) all of them
175. In 1945 the British offer was made by the then Viceroy and Governor-General of India:
(a) Lord Wavell (b) Lord Linlithgo
(c) Sir Simon (d) Cyril Radcliffe
176. The main feature(s) of Wavell Plan were:
(a) The Governor-General's Executive Council was to be enlarged with immediate effect
(b) All the members of Governor-General's Executive Council, except the Governor-General and the Commander-in-Chief, were to be Indians
(c) The Executive Council of the Governor-General was to contain equal number of caste Hindus and Muslims and Responsible Government was to be restored in the Provinces
(d) All of the above
177. The Congress accepted the Wavell Plan whereas Muslim League rejected it. Why?

- (a) It delayed the partition of India for another decade
 (b) It offered Interior Ministry to Congress in the Executive Council
 (c) It did not give league the sole right to nominate the Muslim members to the Executive Council
 (d) None of the above
178. The Gandhi-Jinnah talks of 1944 proved fruitless because Gandhi wanted that the Muslim should join the Congress and that the two communities should settle their differences after the withdrawal of the British. The Quaid, on the other hand, demanded that the:
- (a) Muslims will not join Congress
 (b) settlement must proceed independence
 (c) both of them
 (d) none of them
179. Who was the last viceroy of Indo-Pak subcontinent?
 (a) Lord Wavell
 (b) Lord Linglintho
 (c) Lord Mount Batten
 (d) Cyril Radcliffe
180. In the election of 1945-46, seats in central legislature Muslim League won:
 (a) all seats
 (b) all except five seats
 (c) half seats
 (d) two third seats
181. After the election of 1945-46 the British government sent a Mission of three Cabinet ministers. What was its mission?
 (a) Hindu, Muslims agreement on communal issue
 (b) Hindu, Muslims agreement on partition issue
 (c) Hindu, Muslims agreement on representation issue
 (d) Hindu, Muslims agreement on the constitutional
182. In 1946 the mission sent by British government is called:
 (a) Cabinet Plan (b) Cabinet mission
 (c) special mission (d) British mission
183. Under the Cabinet mission 'compromise formula' India was to remain united and the right of self-determination was apparently conceded to the:
 (a) Sikhs (b) Anglo-Indians
 (c) Muslims (d) Kashmiris
184. The Muslim League accepted the Cabinet Mission Plan in the hope that it would ultimately lead to the establishment of Pakistan. The Congress, on the other hand, accepted the long-term part of the Plan but:
 (a) refused to join the interim government
 (b) refused to short term part
 (c) refused to join government
 (d) protested against the Plan
185. Why Muslim League withdrew of the acceptance of Cabinet Mission Plan and decided to resort to direct action to achieve Pakistan?
 (a) the British government refused the partition of India
 (b) the British government postpone the partition of India
 (c) The Cabinet Mission Plan refused the establishment of a new government
 (d) The Cabinet Mission Plan postponed the establishment of a new government
186. What was the reaction of Congress when the Muslim League withdrew acceptance of the Cabinet Mission Plan?
 (a) it accepted the Plan
 (b) it joined the Muslim League
 (c) it completely rejected the Plan
 (d) it started agitation
187. After the joining of Congress when Muslim League join the interim government?
 (a) October 1946 (b) October 1942
 (c) October 1940 (d) October 1936
188. When the British Prime Minister Attlee announced that Britain would withdraw from the subcontinent by June 1948 at the latest?
 (a) 20 February 1947
 (b) 10 February 1947
 (c) 25 February 1947
 (d) 29 February 1947
189. For actual transfer of power who was replaced with Viceroy Wavell?
 (a) Lord Dilhousie
 (b) Radcliffe
 (c) Lord Mountbatten
 (d) none of them
190. How many boundary commission(s) were appointed to demarcate the boundaries between the new states of Pakistan and India?
 (a) five (b) ten
 (c) nine (d) two
191. When the Indian Independence Bill was moved in the British Parliament?
 (a) 4 July 1947 (b) 10 July 1947
 (c) 2 July 1947 (d) 8 July 1947
192. When the Indian Independence Bill became an Act?
 (a) 15 July 1947 (b) 18 July 1947
 (c) 28 July 1947 (d) 30 July 1947
193. Which of the following leaders had helped Quaid-i-Azam in the preparation of his Fourteen Points in 1929?
 (a) Allama Iqbal
 (b) Sir Agha Khan
 (c) Hakim Ajmal Khan
 (d) Mualana Muhammad Ali Jauhar
194. "Waddia Mander Educational Scheme" was prepared in 1937 by:
 (a) Vallabhai Patel
 (b) Rajendra Prasad

- (c) Mualan Abu-al-Kalam Azad
(d) Dr. Zakir Hussain
195. Which of the following leaders resigned from the Indian National Congress in 1928 as a protest against Nehru Report 1928?
(a) Quaid-i-Azam
(b) Maulana Zafar Ali Khan
(c) Maulana Muhammad Ali Jauhar
(d) Allama Muhammad Iqbal
196. During the freedom movement, weekly "Paisa Akhbar" was published by:
(a) Munshi Mahboob Aalam
(b) Syed Hasan Riaz
(c) Abdul Haleem Sharar
(d) None of the above
197. Under the partition plan 1947, referendum was held in NWFP and former East Pakistani territory of:
(a) Rajshahi (b) Sylhet
(c) Khulna (d) Chittagong
198. Before the partition of India, Sylhet was the part of:
(a) Assam (b) Bengal
(c) Utter Perdesh (d) Punjab
199. Which of the following personalities was the member of Punjab Boundary Commission 1947, on behalf of Pakistan?
(a) Justice Din Muhammad
(b) Justice Abu Saleh Muhammad,
(c) Justice M. Akram,
(d) Justice S.A. Rehman.
200. When Pakistan Muslim League was founded in 1947, its first President was:
(a) Quaid-i-Azam
(b) Liaquat Ali Khan
(c) Chaudhri Khaliquzzaman
(d) Khawaja Nazimuddin
201. The first country recognized Pakistan after independence was:
(a) America (b) Indonesia
(c) Iran (d) Afghanistan
202. Pinpoint the contribution of Titu Mir in the history of Indo-Pak Sub-continent:
(a) he diligently worked for the independence and renaissance of the Muslims of east Punjab
(b) He stood against the British customs, practices and way of life
(c) He started Fraizi Movement in the province of Bihar
(d) he fought against the elimination of Hindu rituals
203. "The British Government passed this act to introduce better provision for the Governor General's Council and for Local government. According to this Act, the Indian people were included in the Governor General's Council for the first time in the history of India." It was:
(a) Legislative Councils Act 1860
(b) Indian councils Act 1892
(c) Indian Legislative Council Act 1860
(d) British Indian councils Act 1859
204. "The provincial legislative councils will have four-fifth elected members and one-fifth as nominated members." This recommendation was envisaged in:
(a) Indian Legislative Council Act 1860
(b) Lucknow pact
(c) Montague-Chelmsford Reforms 1919
(d) Gandhi Irwin Pact
205. "The system of Dyarchy was scrapped in the provinces and introduced in the centre." This reform was introduced by:
(a) Montague-Chelmsford Reforms 1919
(b) Minto-Morley reforms
(c) Government of India Act 1935
(d) Gandhi Irwin Pact
206. "Chaudhary Rehmat Ali's map of Pakistan showed three independent Muslim units forming a triple alliance." Pinpoint the unit proposed by him among the following which he called as 'Bang-e-Islam'.
(a) Kashmir (b) Bengal
(c) NWFP (d) Punjab
207. Who participated in all the three sessions of the Round Table Conference (1930-1932)?
(a) Fatima Jinnah
(b) Annie Besant
(c) Jahan Ara Gul
(d) Begum Jahan Ara Shah Nawaz
208. The Radcliffe Award was announced on:
(a) 17th June 1947 (b) 18th July 1947
(c) 15th August 1947 (d) 17th August 1947
209. The membership of Pakistan in the UNO was opposed by:
(a) India (b) Afghanistan
(c) Israel (d) None of these
210. Who was the Viceroy of India from 1889 to 1905?
(a) Lord Curzon
(b) Lord Mountbatten
(c) Lord Irwin
(d) Lord Attlee
211. Who was not a member of the 1st Cabinet of Pakistan?
(a) Sardar Abdur Rab Nishtar
(b) Hussain Shaheed Suharwardy
(c) Jogindar Nan Mandal
(d) Malik Ghulam Muhammad
212. Who coined the name of All India Muslim League?
(a) Sir Zaffar Ullah Khan
(b) Sardar Abdur Rab Nishtar
(c) Nawab Saleem Ullah Khan
(d) Sir Muhammad Shafi
213. Who was the first viceroy of India?
(a) Lord Ripon (b) Lord Canning
(c) Lord Curzon (d) Lord Mayo

214. Who was the first President of Pakistan Muslim League?
 (a) Nawab Khaliq-u-Zaman
 (b) Sir Agha Khan III
 (c) Nawab Waqar ul Mulk
 (d) Nawab Mohsin ul Mulk
215. Khilafat movement was ended with the abolition of khilafat in:
 (a) 1922 (b) 1923
 (c) 1924 (d) None of the above
216. All India Muslim League was joined by Jinnah at Agra in:
 (a) 1913 (b) 1914
 (c) 1915 (d) 1916
217. How Many Members Were In Objective resolutions committee?
 (a) 24 members (b) 26 members
 (c) 36 members (d) None of the above
218. How many members were in the first Constituent Assembly?
 (a) 69 (b) 79
 (c) 89 (d) 100
219. Jalian wala Bagh incident took place in the year
 (a) 1918 (b) 1919
 (c) 1920 (d) 1921
220. The princely states in India at the time of independence?
 (a) 540 (b) 562
 (c) 570 (d) 590

Answer Key

- | | | | | | | | |
|-------|-------|-------|--------|--------|--------|--------|--------|
| 1. c | 29. a | 57. b | 85. a | 113. d | 141. b | 169. b | 197. b |
| 2. b | 30. d | 58. d | 86. b | 114. c | 142. c | 170. b | 198. a |
| 3. b | 31. c | 59. a | 87. a | 115. d | 143. a | 171. a | 199. a |
| 4. d | 32. b | 60. c | 88. c | 116. a | 144. a | 172. a | 200. c |
| 5. c | 33. c | 61. b | 89. b | 117. d | 145. c | 173. c | 201. c |
| 6. a | 34. a | 62. a | 90. a | 118. c | 146. a | 174. b | 202. d |
| 7. b | 35. a | 63. b | 91. d | 119. c | 147. b | 175. a | 203. a |
| 8. d | 36. a | 64. c | 92. b | 120. d | 148. c | 176. d | 204. b |
| 9. c | 37. a | 65. b | 93. a | 121. b | 149. a | 177. c | 205. c |
| 10. b | 38. b | 66. a | 94. d | 122. a | 150. c | 178. b | 206. b |
| 11. c | 39. c | 67. a | 95. a | 123. b | 151. b | 179. c | 207. d |
| 12. c | 40. a | 68. b | 96. d | 124. c | 152. b | 180. a | 208. d |
| 13. c | 41. d | 69. c | 97. b | 125. b | 153. a | 181. d | 209. b |
| 14. a | 42. d | 70. b | 98. d | 126. a | 154. c | 182. b | 210. a |
| 15. c | 43. a | 71. c | 99. d | 127. b | 155. a | 183. c | 211. c |
| 16. b | 44. a | 72. b | 100. a | 128. a | 156. c | 184. a | 212. d |
| 17. d | 45. c | 73. a | 101. a | 129. b | 157. d | 185. d | 213. b |
| 18. a | 46. b | 74. b | 102. b | 130. c | 158. d | 186. a | 214. b |
| 19. a | 47. b | 75. a | 103. b | 131. b | 159. c | 187. a | 215. c |
| 20. c | 48. d | 76. b | 104. d | 132. a | 160. a | 188. a | 216. a |
| 21. b | 49. d | 77. d | 105. b | 133. d | 161. a | 189. c | 217. a |
| 22. d | 50. c | 78. b | 106. b | 134. a | 162. a | 190. d | 218. b |
| 23. b | 51. a | 79. a | 107. d | 135. d | 163. a | 191. a | 219. b |
| 24. b | 52. d | 80. b | 108. b | 136. a | 164. c | 192. b | 220. b |
| 25. c | 53. c | 81. c | 109. c | 137. a | 165. c | 193. d | |
| 26. b | 54. d | 82. a | 110. d | 138. c | 166. a | 194. d | |
| 27. a | 55. b | 83. a | 111. b | 139. a | 167. c | 195. c | |
| 28. d | 56. c | 84. b | 112. d | 140. b | 168. d | 196. a | |



ISLAMIC STUDIES

ENGLISH MEDIUM

Prophet Muhammad (PBUH)

- ✓ Prophet Muhammad (PBUH) was in **571 A.D 22nd April**.
- ✓ Prophet Muhammad (PpBUH) was born in the Islamic month of **Rabi ul Awaal**.
- ✓ Prophet was born in **1st Year of Elephant**.
- ✓ Year **570** known as year of **Elephant or Amal Fil**.
- ✓ Father's name, **Hazrat Abdullah**.
- ✓ **545** Birth of Abdullah, the Holy Prophet's father.
- ✓ **Six months** before the Prophet's birth his **father died**.
- ✓ Mother' Name, **Hazrat Amna**.
- ✓ **Hazrat Amna** belonged to **Bani Zohra**.
- ✓ **577** The Holy Prophet visits Madina with his mother. Death of his mother.
- ✓ Amina was buried at **Abwa** between **Makkah & Madina**.
- ✓ Maternal Grand Father's name **Wahib bins Abdul Munnaf**.
- ✓ Maternal Grandmother, **Batarah**.
- ✓ Muhammad is the messenger of Allah is stated in **Surah Al-Fath**.
- ✓ The name **Muhammad (PBUH)** has been mentioned **4 times** in the Holy Quran.
- ✓ The name "Muhammed" occurred once in each of the following *Surahs* (Chapters) and verses:
 - **Surat Aal Imran** (Chapter 3, Verse 144)
 - **Surat Al Ahzaab** (Chapter 30, Verse 40)
 - **Surat Muhammed** (Chapter 47, Verse 2). Note that this same Surah (Chapter) is also called Muhammed.
 - **Surat Al Faith** (Chapter 48, Verse 29).
- ✓ The name **Ahmed (PBUH)** was mentioned only **once** in the Quran.
- ✓ The name "Ahmed" occurred in **Surat As-Saff**, (Chapter 71, Verse 6).
- ✓ The name **Muhammad** was proposed by **Abdul Muttalib** while the name **Ahmed** was proposed by **Bibi Aminah**.
- ✓ Grandmother name, **Fatima**.
- ✓ Prophet Muhammad (PBUH) belonged to **Hashmi** family.

- ✓ Name the foster mother(s) of the Holy Prophet (PBUH) **hazrat Halima (RA), Hazrat Sobia (RA), Hazrat Khola (RA).**
- ✓ Real name of **Abdul Mutalib** was **Shaba**.
- ✓ **580** Death of Abdul Muttalib, the grandfather of the Holy Prophet.
- ✓ **586** The Holy Prophet participates in the war of Fijar.
- ✓ **595** The Holy Prophet marries Hadrat Khadija.
- ✓ Holy prophet made **first trade** journey at the age of **9 year**.
- ✓ Prophet Muhammad (PBUH) went to Syria with **Abu-Talib** at the age of **12 years**.
- ✓ In **Ramzan-ul-Mubarik** Islamic month, first Wahi was descended.
- ✓ In **first wahi** Surah **Al-Alaq** the first verse (ayat) in the holy Qur'an revealed.
- ✓ **9** is the number of **uncles** and **6 aunts**.

The scholars held different views about the exact number of the paternal uncles of the Prophet, sallallaahu 'alayhi wa sallam; it was said that they were twelve, some said ten, and others said nine. Their names are as follows:

- 1) Al-'Abbaas
- 2) Hamzah
- 3) Abu Taalib, and his real name was 'Abd Manaaf.
- 4) Az-Zubayr
- 5) Al-Haarith
- 6) Hajl, his real name was Al-Mugheerah; it also said that his name was Al-Ghaydaaq.
- 7) Al-Muqawwim
- 8) Dhiraar
- 9) Abu Lahab, and his real name was 'Abdul-'Uzza

Only two of them embraced Islam: Al-'Abbas and Hamzah.

The paternal aunts (عمات) of the Prophet, sallallaahu 'alayhi wa sallam, were six, and their names are:

- 1) Safiyyah
- 2) Umm Hakeem Al-Baydhaa'
- 3) 'Aatikah
- 4) Umaymah
- 5) Arwa
- 6) Barrah

Safiyyah embraced Islam. Scholars held different views whether 'Aatikah and Arwa embraced Islam or not; some scholars held that it was authentically established that Arwa embraced Islam.

- ✓ Hazrat Hamza (RA) did embrace Islam in **Fifth Nabavi**.
- ✓ **Sayyid-ush-Shohadah** was the title of **Hazrat Hamza (RA)**.
- ✓ **Hazrat Hamza (RA)** was also **foster brother** of Muhammad (PBUH).

✓ Prophet Muhammad (PBUH) had **3 sons, 4 daughters**.

| | | |
|---|---------------------------|----------------|
| 1 | Qasim ibn Muhammad | (AD 598 – 601) |
| 2 | Zainab bint Muhammad | (AD 599 – 629) |
| 3 | Ruqayyah bint Muhammad | (AD 601 – 624) |
| 4 | Umm Kulthum bint Muhammad | (AD 603 – 630) |
| 5 | Fatimah bint Muhammad | (AD 605 – 632) |
| 6 | Abdullah ibn Muhammad | (AD 615) |
| 7 | Ibrahim ibn Muhammad | (AD 630-632) |

✓ **Sheema** was the **foster sister** of Holy Prophet.

✓ **Abdualh Bin Abu Sheema** was the **foster brother** of Prophet.

✓ Hazrat Haleema looked after the holy prophet for **4 years**.

✓ **Surname** of **Prophet** was **Abu-ul-Qasim**.

✓ **Da'ia** of the Prophet was **Shifa** who was mother of **Abdul Rehman bin Auf**.

✓ **First** foster mother was **Sobia** who was **mother of Hamza**.

✓ **Foster father** of Prophet (PBUH) was **Haris**.

✓ For **two years** **Abdul Mutalib** took care of Prophet.

✓ **Qaswa** is the name of camel which the Holy Prophet (PBUH) was riding in the migration of Madina.

✓ Prophet Muhammed (SAWS) performed a total of **four Umrahs** and **one Hajj**.

| | | |
|---|--------------|--------------------------|
| 1 | First Umrah | (6 th Hijri) |
| 2 | Second Umrah | (7 th Hijri) |
| 3 | Third Umrah | (8 th Hijri) |
| 4 | Fourth Umrah | (10 th Hijri) |
| 5 | Hajj | (10 th Hijri) |

✓ **1 Lac companions** accompanied Prophet at **last Hajj**.

✓ **Nafeesa carried Khadija's** message of marriage to Prophet.

✓ Holy Prophet demised at the age of **63**.

✓ Zaid Bin Haris (R.A) was the **adopted son** of the **Holy Prophet**.

✓ **Kuniyaat** of the Holy Prophet was **Abul Qasim**.

✓ Prophet narrated the event of **Miraj** first of all to **Umm-e-Hani** (real sister of Ali)

✓ Prophet was staying at the house of **Umme-e-Hani** on the **night of Miraj**.

✓ In Miraj Prophet traveled from **Baitul Muqadas** to **Sidratul Mantaha**.

✓ **Seal** of **Prophet** was made of **Silver**.

✓ **Allah, Rasool, Muhammad** was written on the **Holy Prophet (SAW) seal**.

✓ Islamic official seal started on **1st Muharram, 7 A.H**

✓ The **grave of the Prophet** was prepared by **Hazrat Abu Talha**.

- ✓ The **flag colour** of the Holy Prophet was **white** and **yellow** at the time of conquest of Makkah.
- ✓ The **camel driver** of Prophet at the fall of Mecca was **Usama bin Zaid bin Haris**.
- ✓ Prophet issued order of killing **Abdul Uza bin Khatal** at the fall of Mecca.
- ✓ Prophet was **buried** in the **hujra of Avesha**.
- ✓ After **6 years** of the birth of Holy prophet **Bibi Aamna died**.
- ✓ After **8 years** of the birth of Prophet **Abdul Muttalib died**.
- ✓ Prophet prayed **2 years** in **cave Hira** before first revelation.
- ✓ The **name of Ibadat** done by Prophet in **Hira** was **Tahanas**.
- ✓ **Cave of Hira** is in **Jabal-e-Noor** Mountain.
- ✓ Prophet spent his last days in **Avesha's house**.
- ✓ Prophet stayed in **Ayyub Ansari's** house for **7 months**.
- ✓ Prophet did covert messaging at House of Arkam upto **3 Nabvi**. (i.e for 3 years)
- ✓ Prophet offered **congregational prayer** in Kaaba in **6th Nabvi**.
- ✓ The day when Prophet delivered his **last Khutab** was **Juma**.
- ✓ The **grave of the Prophet** was prepared by **Hazrat Abu Talha**
- ✓ Holy prophet labored in the formation of **Masjid-e-Quba**.
- ✓ The name of **sword** used by the Holy Prophet (PBUH) at the time of war was **Zulifqar**.

The Life of Prophet Muhammad in Makkha and Madina:

- ✓ Prophet (PBUH) stayed at **Makkha for 53 years** and in **Madina 10 years**.
- ✓ At age of **40** holy Prophet received **first Wahi**.
- ✓ The first "Wahi" was revealed upon the Holy Prophet Muhammad in **610 AD**.
- ✓ **5 verses** (Ayats) were in **first Wahi**.
- ✓ **Vargha Bin Naufal** verified Prophet for the first time.
- ✓ **Vargha bin Naufal** was Follower of religion of **Hazrat Ibrahim (AS)**.
- ✓ First Wahi was descended in **Hira Cave**.
- ✓ **6 month** gap between first and second wahi.
- ✓ The Economic and Social Boycott of the **Banu Hashim (A.D. 616-619)**
- ✓ **7th year** of Nabvi the event of the social boycott of Banu Hashim take place.
- ✓ The meaning of **Shi'b** is **valley**.
- ✓ The **10th year** of the Prophethood (Nabuwat) was called the year of grief (Aam-ul-Hazan) for Holy Prophet (PBUH) on account of the death of **Hazrat Abu Talib** and **Hazrat Khadija**.
- ✓ The Holy prophet preach Islam **3 year** secretly.
- ✓ Prophet preached openly in **4th Nabvi**.
- ✓ Makkah conquest occurred in **8th year** of **Hijra**.

✓ Prophet (PBUH) recited surah Al-Fatha at the conquest of Makkah.

✓ Prophet stayed at Makkah for 15 days after its conquest.

✓ At Koh-e-Safa, Prophet addressed after conquest of Makkah.

✓ Prophet spent his last days in Ayesha's house.

✓ Abu Jehl the worst enemy of the Holy Prophet (PBUH) at Makkah.

✓ Omer bin Hisham was the original name of Abu Jehl.

✓ Abu-al-Hakim is the title of Abu Jehl.

✓ Hazrat Samiya (RA) was martyred by Abu Jehl.

✓ The first migration of the Companions and relatives of the Prophet Muhammad (PBUH) was to Abyssinia (Ethopia) in 615 AD.

✓ The total number of migrated people to Abyssinia was 15 (11 men and 4 women)

✓ 616 Hazrat Umer (R.A) accepts Islam.

✓ Second migration to Habshah took place in 616 AD.

✓ Second migration to Abyssinia 101 people with 18 females.

✓ Through sea route migration to Habshah was made.

✓ Najashi was the king of Habshah at the time of migration.

✓ 619 Lifting of the boycott. Deaths of Abu Talib and Hazrat Khadija.

✓ 620 Journeys to Taif.

✓ In 622 A.D Holy Prophet migrated to Madina.

✓ The Islamic Calendar (hijra) started in the year 622 AD.

✓ 624 Battle of Badr.

✓ 625 Battle of Uhud.

✓ 626 Expedition of Banu Mustaliq.

✓ 627 Battle of the Trench.

✓ 628 Truce of Hudaibiya.

✓ 629 The Holy Prophet performs the pilgrimage at Makkah.

✓ 630 Conquest of Makkah.

✓ 631 Expeditions to Tabuk.

✓ 632 Farewell pilgrimage at Makkah.

✓ 632 Death of the Holy Prophet.

✓ 10th Nabvi is called the year of Sorrow.

✓ Prophet visited Taif in 10th Nabvi.

✓ Taif is located 94 km from Makkah.

✓ Prophet with Zaid bin Haris, went Taif and stayed for 10 days.

✓ Al-Lat was the name of the idol that was worshiped by Ahl-e-Taif.

✓ The cave of Hira is also known as Jabal-e-Noor.

✓ The cave of Hira 3 miles away situated from Makkah.

- ✓ The Cave of Soar is located near Makkah **5 miles**.
- ✓ **Medina** is **338 km** from **Makkah**. (210 miles)
- ✓ **Quba** is **3 miles** away from **Madina**.
- ✓ **Rakkana** was the great wrestler of the Quraish who was defeated **three times** by **Holy Prophet (PBUH)**.
- ✓ The **Cave of Soar** takes refuge during migration of the Prophet (PBUH).
- ✓ **Asma-bint-Abi Bakr** was to provide food for Holy Prophet (PBUH) in the Cave of Soar.
- ✓ Lady named **Zainab** tried to **poison** the Holy Prophet.
- ✓ **Third son-in-law** of Prophet was **Abul A'as**.
- ✓ **Namaz-e-Juma** became Farz in **Medina**.
- ✓ The **old name of Madina** was **Yasrab**.
- ✓ **Idols in Kaba** before Islam numbered **360**. The **largest idol** named **Habal**.
- ✓ Meaning of **Hurairah** is **cat**.
- ✓ The **camel** of the Holy Prophet (PBUH) sits at Medina near the house of **Hazrat Abu Ayyub Ansari (R.A)**.
- ✓ The Hajj of Hazrat Muhammad (PBUH) is also called **Hajja-tul-Widah**.
- ✓ Khutaba-e-Hajja-tu-Widah delivered in **Arafat**.
- ✓ Jannat-ul-Baq'ee is a **graveyard**.
- ✓ Jannat-ul-Baq'ee is located in **Medina**.
- ✓ **Hazrat Dhea bin Kalbi (RA)** brought the letter to **Qaiser-e-Room**.
- ✓ **Hazrat Abdullah bin Hazafa (RA)** took the message of the Holy Prophet (PBUH) to the **Persian king**.
- ✓ **Hazrat Hateeb bin Abi Balaqa (RA)** took the message of the Holy Prophet (PBUH) to the **Egyptian king**.
- ✓ **Hazrat Umer bin Ummaya (RA)** took the message of the Holy Prophet (PBUH) to the **Ethiopia king**.
- ✓ **Hazrat Umer bin A'as (RA)** took the message of the Holy Prophet (PBUH) to the **king of Oman**.
- ✓ **Hazrat Abai bin Ka'ab (RA)** wrote the message for the **king of Oman**.
- ✓ Only sahabi **without seeing** Prophet "**Awais Karni**".

Shab E Meraj Events:

- ✓ On 27th Rajab, 10 Nabvi the event of Miraj took place.
- ✓ Incident Miraj is also known as Waqiah Assraa.
- ✓ The meaning of Assraa is "ascension".
- ✓ Prophet narrated the event of Miraj first of all to Umm-e-Hani (real sister of Ali RA)
- ✓ Umm-e-Hani was the daughter of Abu Talib.
- ✓ Prophet was staying at the house of Umme-e-Hani on the night of Miraj.
- ✓ In Miraj Prophet traveled from Baitul Muqadas to Sidratul Mantaha.
- ✓ Sidratul Mantaha means "Tree of Noor".
- ✓ At the night of Miraj, Holy Prophet (PBUH) was gifted with 50 Salats.
- ✓ On 10th Nabvi the five prayers became Farz.
- ✓ Nine times Holy prophet (PBUH) went to Allah with the request to reduce the number of Salats – until these remained only five.
- ✓ In Miraj Jibrael called Aazan in Baitul Muqadas.
- ✓ Prophet (PBUH) led all the prophets in a prayer in Miraj at al-Aqsa.
- ✓ Hzarat Adam met with Holy Prophet (PBUH) on the 1st heaven.
- ✓ Hzarat Isa and Hazrat Yahya met with Holy Prophet (PBUH) on the 2nd heaven.
- ✓ Hzarat Yaqub met with Holy Prophet (PBUH) on the 3rd heaven.
- ✓ Hzarat Idress met with Holy Prophet (PBUH) on the 4th heaven.
- ✓ Hzarat Haroon met with Holy Prophet (PBUH) on the 5th heaven.
- ✓ Hzarat Musa met with Holy Prophet (PBUH) on the 6th heaven.
- ✓ Hzarat Ibrahim met with Holy Prophet (PBUH) on the 7th heaven.
- ✓ Hazrat Hamza and Hazrat Umar RA embraced Islam in 6th Nabwi.

(Important event from 1st A.H to 11 A.H)**1 A.H**

- ✓ **Charter of Madina** was issued on **1 A.H** it had **57 Article**.
- ✓ The charter of Madina was concluded between **Muslims and Jews & other non-Muslims**.
- ✓ **First Ghazwah** of Islam was **Widan (Abwa)**, fought in 12th month of First Hijrah.
- ✓ **First Azan** was called out in 1st Hijra.
- ✓ Prophet addressed **Khutba-e-Jum'aa** for first time in 1st Hijra.
- ✓ Construction of **Masjid-e-Nabvi** started in Rabiulawal, 1Hijra.
- ✓ **Meesaq-e-Medina** took place in 1 Hijra.
- ✓ Holy Prophet offered **1st Eid prayer** in I Hijra.

2nd A.H

- ✓ **Change of Qibla** occurred on 15 Shaban, 2 A.H (Monday, during Zuhr).
- ✓ **Jang Badr** occurred in **2 A.H**.
- ✓ **Moawakhat** (the brotherhood) took place in 2nd Hijra.
- ✓ **Jihad** was allowed in 2nd Hijra.
- ✓ **Soam** became obligatory in 2nd Hijra.
- ✓ **Zakat** became Farz in 2nd Hijra.
- ✓ **Hazrat Hamza bin Abdul Mutalib (R.A)** appointed as a Commander-in-Chief of the Islamic Army in 2nd Hijra.
- ✓ **First Eid Fitar** is the important event of first Shawal, 2nd Hijra.
- ✓ **Ali married Fatima** in 2nd Hijra.
- ✓ **Ghazwa Badr** was an important event that took place in 2nd Hijra.

3rd A.H

- ✓ **The laws about orphans** were revealed to the Holy Prophet (PBUH) in 3rd A.H.
- ✓ **The laws of inheritance** were revealed to the Holy Prophet (PBUH) in 3rd A.H.
- ✓ **Ghazwa Ohad** took place in 3rd Hijra.

4th A.H

- ✓ **Jewish tribe** of Banu Nazir **expelled** from Madina in 4th Hijra.
- ✓ **Wine prohibited** in 4th Hijra.
- ✓ **The command of Hijab** was revealed to the Holy Prophet (PBUH) in 4 A.H.
- ✓ **Gambling** was banned in 4th Hijra.
- ✓ **Tayyiumum** was obligatory in 4 A.H.

5th A.H

- ✓ **Tayyamum** allowed in 5th Hijra.
- ✓ **Ablution** made obligatory in 5th A.H.
- ✓ The **battle of Trench** was fought in 5th A.H.
- ✓ The clash of **Banu-al-Mustaliq** occurs in 5th A.H.
- ✓ **The laws about rape** were revealed to the Holy Prophet (PBUH) in 5 A.H.

6th A.H

- ✓ Bait-e-Rizwan took place in 6th Hijra.
- ✓ Bait-e-Rizwan was made under the tree of Babou.
- ✓ Holy Prophet (PBUH) performed 1st Umirah.
- ✓ The treaty of Huddaibiah is the most important event of 6th Hijra.
- ✓ Hazrat Usman RA went to Makkah as an ambassador of Muslims in 6th hijra.

7th A.H

- ✓ Ambassadors sent to Arab and other countries in 7th Hijra.
- ✓ Holy Prophet (PBUH) performed 2nd Umirah.
- ✓ King of Iran tore away the message of Prophet (PBUH).
- ✓ Hazrat Amer bin Al-Aas (RA) embrace Islam in 7th Hijra.
- ✓ Islamic official seal started on 1st Muharram, 7th A.H.
- ✓ Khalid bin Waleed embraced Islam in in 7th Hijra.
- ✓ The Battle of khayber was fought in 7th A.H.
- ✓ Boycott and Confinement by makkah Infidels at Shi'bi Abi Talib.

8th A.H

- ✓ The victory of Makkah took place in 8th Hijra.
- ✓ Holy Prophet (PBUH) performed 3rd Umirah.
- ✓ Abu Sufyan embraces Islam in 8th Hijrah.
- ✓ Hazrat Khalid bin Waleed (R.A) embraced Islam in 8th Hijra.
- ✓ The final command about the prohibition of interest revealed to the Holy Prophet (PBUH) in 8th Hijra.

9th A.H

- ✓ Haji was made compulsory in the 9th Hijra.
- ✓ Year of Deputation is 9th Hijrah.
- ✓ 9th Hijra is known as Aam-ul-wafood.

10th A.H

- ✓ Prophet (PBUH) performed Haji in 10th Hijra.
- ✓ Holy Prophet (PBUH) performed 4th Umirah.

11th A.H

- ✓ The death of Holy Prophet (PBUH) occurred on 12th Rabi ul-Awwal of 11th Hijra.

KHULAFAT-E-RASHEDIN

Kalafat-e-Rashada is called that Government which is run on national or international scale, according to the method of Nabvi. In other words, Kalafat-e-Rashada means completely Islamic type of Government which is according to Qur'an and Sunnah.

Hazrat Abu Bakr (RA): (632-634)

- ✓ Hazrat Abu Bakr (RA) was born in 573 AD and died in August 23, 634.
- ✓ Hazrat Abdullah is the real name of Hazrat Abu Bakr RA.
- ✓ Abu Kahifa Usman bin Amer (RA) is the father of Hazrat Abu Bakr (RA).
- ✓ Salma bint Sakhar bin Amer (RA) is the mother of Hazrat Abu Bakr (RA).
- ✓ Amer bin Umro is the grandfather of Hazrat Abu Bakr (RA)
- ✓ Hazrat Abu Bakr (RA) was the first male to accept Islam.
- ✓ Siddique was the title of Abu Bakr (RA).
- ✓ Hazrat Abu Bakr (RA) traded in cloth.
- ✓ The verification of Miraj entitled Hazrat Abu Bakr RA to the title of siddique.
- ✓ Hazrat Muhammad (PBUH) and Hazrat Abu Baker (RA) take refuge in cave Soar.
- ✓ 11 A.H (632 AD) Hazrat Abu Bakr RA elected as Caliph.
- ✓ Hazrat Abu Bakr was the first Ameer-ul-Hajj appointed by the Holy Prophet (PBUH).
- ✓ The duration of Khilafat of Abu Bakr Siddique RA 2 years 3 months 11 days.
- ✓ Hazrat Abu Bakr (RA) gave the collection of Quran to Hazrat Hafsa.
- ✓ Hazrat Abu Bakr RA purchased the land for Masjid e Nabvi.
- ✓ 5 Ashra Mubashra embraced Islam on the guidance of Hazrat abu Bakr.
- ✓ In the Khilafat of Hazrat Abu Bakr (RA) Banu Asad, Banu Ghatfan, and Banu Murrah refused to Pay Zakat.
- ✓ Musalima was the false prophet who sent a letter to the Holy Prophet (SAW) demanding the division of Arabian peninsula into two halves.
- ✓ Sajjah, false prophetess, belong to the tribe of Bani Tameem.
- ✓ Hazrat Abu Bakr RA had knowledge of dreams.
- ✓ Syria was conquered on 12 A.H (633 AD).
- ✓ Hercules was the king of Syria.
- ✓ Hazrat Abu Bakr RA died on 13th Hijra.
- ✓ The first Person to make Ijtihaad was Abu Bakr Siddique RA.
- ✓ Hazrat Abu Bakr RA is buried near the Holy Prophet SAW.
- ✓ Hazrat Umer (RA) was the Imam of Salat-e-Janaza of Hazrat Abu Bakr (RA).
- ✓ At the time of death the age of Hazrat Abu Bakr RA was 63 year.

Hazrat Umer (RA): (634-644)

- ✓ Hazrat Umar RA was born in 581 AD.
- ✓ Farooq was the title of Hazrat Umar RA.
- ✓ Hazrat Umar RA father name was Khatab bin Nafeel.
- ✓ Grandfather of Hazrat Umar RA was Nafeel bin Abdul Uzza.
- ✓ Hazrat Umar RA remained Khalifa for 10.5 years.

- ✓ Hazrat Umar RA belonged to the tribe Banu Addi.
- ✓ Hazrat Umar RA got the title of Ameer ul Momineen for the first time.
- ✓ Hazrat Usman RA is called Jami-a-ul-Quran.
- ✓ In Hazrat Umar RA Khilafat, Iraq came under the Muslim dynasty.
- ✓ Hazrat Umar RA established Islamic Calendar.
- ✓ Hazrat Umar RA made a mind to embrace Islam after the recitation of Surah Al Taha by his sister.
- ✓ Hazrat Umar RA embraced Islam in 6th Nabwi
- ✓ 33 was the age of Hazrat Umar RA when he accepted Islam.
- ✓ Hazrat Umar RA establish jail department.
- ✓ Hazrat Umar RA establish Police department.
- ✓ Hazrat Umar RA establish education department.
- ✓ Hazrat Umar RA establishes the department of finance.
- ✓ The name given for the department of finance was Dewan.
- ✓ A system of old age pension was established in the reign of Hazrat Umar RA.
- ✓ A system of census of the population of the Muslim state was made in the reign of Hazrat Umar RA.
- ✓ Hazrat Umar RA gave a proper shape to the public treasury, Bait ul Maal.
- ✓ Ba Jamat Taraviah Salat was started in the reign of Hazrat Umar RA.
- ✓ Hazrat Umar RA was the first person to perform Janazah Salat in Jamaat with four Takbeers.
- ✓ Hazrat Umar RA had divided the Islamic Empires into 10 provinces.
- ✓ Hazrat Umar RA placed half of his wealth at the disposal of the Holy Prophet SAW at the occasion of the Tabook expedition.
- ✓ Hazrat Umar RA embracing Islam the Holy Prophet SAW openly went to the House of Allah to observe prayers with other Muslims.
- ✓ Abu Lo'loo Feroze was the killer of Hazrat Umar RA.
- ✓ Hazrat Umar RA died on 23 Hijra.

Hazrat Usman (RA): (644-656)

- ✓ Hazrat Usman RA was born in 577 AD.
- ✓ Hazrat Usman RA was born in 6th year of Elephant.
- ✓ Father name of Hazrat Usman RA was Affan.
- ✓ Mother name of Hazrat Usman RA was Salma bint Shakhar.
- ✓ Grandfather name of Hazrat Usman RA was Abul-A'as.
- ✓ Hazrat Usman RA belonged to the Banu Ummya Tribe.
- ✓ Hazrat Usman RA was the third Caliph.
- ✓ Hazrat Usman RA has the longest tenure as caliph.
- ✓ Hazrat Usman RA khilafat period was 12 years.
- ✓ Hazrat Usman RA was the fourth person who embraced Islam.
- ✓ Abu Amar was the surname of Hazrat Usman RA.
- ✓ Hazrat Usman RA is called Zunnurain.
- ✓ "of two Noor" is the literal meaning of Zunnurain.

✓ **Hazrat Ruqiyah RA** (daughter of Prophet Muhammad PBUH) died on the day of the victory of battle of **Badr**, she was the **wife** of Usman.

✓ After Ruqiyah's death **Ummay Kalsoom RA** (daughter of Prophet Muhammad PBUH) married Usman RA.

✓ **Ghani** was the **title** of **Hazrat Usman RA**.

✓ Hazrat Usman RA made **official copies of Quran**.

✓ Hazrat Usman RA added **2nd Azan** for **Friday prayers**.

✓ Hazrat Usman RA is called **Malik-ut-Tajjar**.

✓ **Abdul Malik Marwan** applied the **dots** in the **Holy Quran**.

✓ Hazrat Usman RA **two times** migrated for the sake of Islam.

✓ Hazrat Usman RA donated **1/3** army expenditures of **Ghazwa-e-Tabook**.

✓ Hazrat Usman RA denoted **one thousand camels** and **seventy horses** for the **Ghazwa-e-Tabook**.

✓ **Bait-e-Rizwan** was taken for Hazrat Usman RA.

✓ **Hazrat Usman RA** was **built a dam** to protect **Madina from floods**.

✓ In **35 year** of Hijra Hazrat Usman RA was martyred.

✓ At the time of Shahadat age of Hazrat Usman RA was **83 year**.

✓ Hazrat Usman RA was **buried** in **Hash kaukab** (Garden of Flower).

Hazrat Ali (RA): (656-661)

✓ Hazrat Ali RA was born in **30th year** of the Elephant.

✓ **Hazrat Abu Talib RA** was the **father** of **Hazrat Ali RA**.

✓ **Hazrat Fatima bint Asad RA** was the **mother** of Hazrat Ali RA.

✓ Hazrat Talib, Hazrat Aqeel RA, Hazrat Jaafer Tayyar RA the brothers of Hazrat Ali RA.

✓ **4 years 9 months** was the duration of Khilafat of Hazrat Ali RA.

✓ **Haider-e-Qaraar** was the **title** of Hazrat Ali RA.

✓ **Abul-Ahsan** and **Abu Turab** is the **surname** of Hazrat Ali RA.

✓ Hazrat Ali RA was called the Gate of **knowledge** by the Holy Prophet (PBUH).

✓ **10 years** was the age of Hazrat Ali RA when embraced Islam.

✓ Hazrat Ali RA embraced Islam on the **second day** of Prophethood of the Holy Prophet PBUH.

✓ Hazrat Ali RA gave **Ghusl** to the dead body of **Hazrat Muhammad (PBUH)**.

✓ Hazrat Ali RA was the **4th** Caliph.

✓ **Hazrat Fatima** (daughter of Muhammad PBUH) was Hazrat Ali RA wife.

✓ **24 year** age at the time of his marriage.

✓ Hazrat Ali RA **conquered** the last **Fort of Khyber**.

✓ The Holy Prophet PBUH awarded his sword "**Zulfiqar**" to Hazrat Ali RA.

✓ Hazrat Ali RA **mother** gave him name "**Haider**".

✓ Hazrat Ali RA did not participate in the **battle** of **Tabook**.

✓ Hazrat Ali RA was **martyred** in **40 Hijra**.

✓ **Abdur Rehman Abn-e-Muljim** was the murderer of Hazrat Ali RA.

✓ **63 years** was the age of Hazrat Ali RA at the time of his death.

- ✓ **Hazrat Hassan RA** led **Salat-e-Janaza** of Hazrat Ali RA.
- ✓ The **mausoleum** of Hazrat Ali RA situated in **Najaf (Iraq)**.
- ✓ **Hazrat Hassan RA** killed Abn-e-Muljim.

KHILAFAT-E-RASHEDA

632 TO 662 A.D

11 HIJRI TO 41 HIJRI

| Name of Caliph | Death (Hijri) | Period of Caliphat |
|-------------------------|---------------|--------------------|
| Hazrat Abu Bakr (RA) | 13 | 11 to 13 |
| Hazrat Umer Farooq (RA) | 23 | 13 to 23 |
| Hazrat Usman (RA) | 35 | 24 to 35 |
| Hazrat Ali (RA) | 40 | 35 to 40 |
| Hazrat Hassan (RA) | 50 | 40 to 41 |

CALIPHATE OF BANU UMMIA (UMMAYYAD DYNASTY)

| | | |
|----------------------------|-----|------------------|
| Ameer Mauhavia | 60 | 41 to 60 (Hijri) |
| Uzeed Bin Muhavia | 64 | 60 to 64 |
| Mahavia II | 64 | 64 to 64 |
| Marwan Bin Hukam | 65 | 64 to 65 |
| Abdul Malik | 86 | 65 to 86 |
| Walid | 96 | 86 to 96 |
| Suleman Bin Abdul Malik | 99 | 96 to 99 |
| Hazrat Umer Bin Abdul Aziz | 101 | 99 to 101 |
| Uzeed Bin Abdul Malik | 105 | 101 to 105 |
| Hasham Bin Abdul Malik | 125 | 105 to 125 |
| Walid II | 126 | 125 to 126 |
| Uzeed III | 126 | 126 to 126 |
| Ibrahim | --- | 126 to 127 |
| Mardan II | --- | 126 to 132 |

CALIPHATE OF BANI ABBAS (ABBASID DYNASTY)

| | | |
|--------------------|------|------------|
| Alsfeh | 136 | 132 to 136 |
| Abu Jaffer mansoor | 158 | 136 to 158 |
| Mohd.Mehdi | 169 | 158 to 169 |
| Hadi | 170 | 169 to 170 |
| Haroon-ur-Rasheed | 193 | 170 to 193 |
| Mohd.Al-Ameen | 198 | 193 to 198 |
| Al-Mamoon | 218 | 198 to 218 |
| Mahtasim Billa | 227 | 218 to 227 |
| Wasiq Billa | 232 | 227 to 232 |
| Al Matwakil | 247 | 232 to 247 |
| Mantsar Billa | 248 | 247 to 248 |
| Mastheen Billa | ---- | 248 to 252 |
| Mahtaz Billa | 255 | 252 to 255 |
| Mahtidi | 256 | 255 to 256 |

Ummul Momineen:

- ✓ The holy wives of the Prophet PBUH are called Ummul Momineen.
- ✓ Mothers of Muslim are the literal meaning of Ummul Momineen.

1). Hazrat Khatija RA:

- ✓ Hazrat Khatija RA was the first wife of the Prophet (PBUH).
- ✓ The Father name of Hazrat Khatija RA was Khuwaylid ibn Asad.
- ✓ The Mother name of Hazrat Khatija RA was Fatimah bint Za'idah.
- ✓ Hazrat Khatija RA belonged to the tribe of Banu Asad.
- ✓ Hazrat Khadijah RA married total three times.
- ✓ Hazrat Khadijah RA was the first person to convert to Islam.
- ✓ Hazrat Khatija RA was married to the Holy Prophet (PBUH) through Warqa bin Nofal.
- ✓ Hazrat Khadija (RA) remained married monogamously with Hazrat Muhammad (PBUH) for 25 years.
- ✓ Hazrat Khatija RA was the first person to read Namaz among the Ummah of the Prophet.
- ✓ Hazrat Khadija RA had 2 sons with the Holy Prophet (PBUH).
- ✓ Hazrat Qasim and Hazrat Abdullah sons of Hazrat Muhammad (PBUH) are buried in Jannat al-Mu'alla.
- ✓ Hazrat Khadija RA had 4 daughters with the Holy Prophet (PBUH).
- ✓ Hazrat Khatija RA was buried at Jannat-e-Moalla in Makka.
- ✓ Hazrat Khadija received salutation from Allah.
- ✓ Hazrat Khatija RA was the only Ummul Momineen who was not buried in Jannatul Baqi.
- ✓ Hazrat Khadija died on the tenth of Ramadan 10th Nabvi.
- ✓ Khadija died at 65 year age.
- ✓ Prophet (PBUH) not offered funeral prayer of Hazrat Khatija RA due to Allah's will.

2). Hazrat Sauda RA:

- ✓ The second wife of the holy Prophet SAW was Hazrat Sauda RA.
- ✓ Her father, Zam'a ibn Qays, was from the Amir ibn Luayy clan of the Quraysh tribe in Mecca.
- ✓ Her mother, Al-Shamus bint Qays, was from the Najjar clan of the Khazraj tribe in Madina.
- ✓ Her first marriage was to the companion of the Holy Prophet, Hazrat Sakran bin Amr.
- ✓ They had one son, Abdur Rahman ibn Sakran, from Hazrat Sakran bin Amr, who was killed in the Battle of Jalula in 637 AD.
- ✓ Hazrat Sauda RA Said about Aysha "My soul might be in her body".
- ✓ Hazrat Sauda RA died in the 22nd year of the Hijra.

3). Hazrat Ayesha RA:

- ✓ Third wife of Holy Prophet (PBUH) was Hazrat Ayesha RA.
- ✓ Hazrat Ayesha RA was the daughter of Hazrat Abu Bakr RA.
- ✓ Umm Ruman is the name of Hazrat Ayesha RA mother.
- ✓ In the Cottage of Hazrat Ayesha, prophet spent his last days.
- ✓ Hazrat Ayesha RA took part practically in Jihad by serving drinking water and nursing wounded mujahideen in the battle.
- ✓ Hazrat Ayesha RA was the youngest wife of Hazrat Muhammad (PBUH).
- ✓ Siddiqah was the title of Hazrat Ayesha RA.
- ✓ Hazrat Ayesha RA is called Al-Tayyabeen.
- ✓ Battle of Camel was fought between Hazrat Ali RA and Hazrat Aysha RA.
- ✓ First women to lead an Islamic army Aysha (Jang Jamal).
- ✓ Hazrat Ayesha RA narrated maximum number of ahadith.
- ✓ Hazrat Ayesha (RA) died on 17 Ramdan.
- ✓ Hazrat Abu Hurrairah RA led funeral prayer of Hazrat Ayesha RA.
- ✓ Her funeral prayer was performed after the Tahajjud prayer.

4. Hazrat Hafsa RA:

- ✓ Hazrat Hafsa RA (wife of Holy prophet) was the daughter of Hazrat Umar RA.
- ✓ Hazrat Hafsa RA Mother Name is Zainab bint Maz'un.
- ✓ Hazrat Hafsa RA was married to Holy Prophet (PBUH) in 3rd Hijra.
- ✓ Fourth Wife of Hazrat Muhammad (PBUH) was Hazrat Hafsa RA.
- ✓ Hazrat Hafsa RA died in 41 hijra.

5. Hazrat Zainab binte Khazeema(RA):

- ✓ Hazrat Zainab RA was born in 595 AD.
- ✓ Hazrat Zainab RA father name was Khuzaimah bin Abdullah.
- ✓ Hazrat Zainab RA Mother Name was Hind bint Auf.
- ✓ Hazrat Zainab RA previous husband was Ubayda ibn al-Harith.
- ✓ Hazrat Zainab RA marriage with Holy Prophet in Muharram 4 Hijri.
- ✓ At the marriage time Hazrat Zainab RA age was 30 years and Prophet (PBUH) was 55 years old.
- ✓ "Umm-ul-masakeen" is the title of Hazrat Zainab RA.
- ✓ "The mother of poor people" is the meaning of Umm-ul-Masakeen.

6. Hazrat Umm-e-Salma RA:

- ✓ Hazrat Umm-e-Salma RA Marriage to the Prophet (PBUH) in Shawwal 4 AH.
- ✓ Hazrat Umm-e-Salma RA was the last of the wives of Prophet to die.
- ✓ Father's Name of Hazrat Umm-e-Salma RA was Abu Umayya ibn al-Mughira.
- ✓ Mother's name of Hazrat Umm-e-Salma RA was Atka bint Amir.
- ✓ Hazrat Umm-e-Salma RA was alive at Karbala tragedy.
- ✓ Hazrat Umm-e-Salma RA died in 59 A.H.
- ✓ Hazrat Abu Hurrairah RA led funeral prayer of Hazrat Umm-e-Salma RA.

7. Hazrat Zainab RA:

- ✓ Hazrat Zainab RA was born in 590 AD.
- ✓ Zaynab's father was Jahsh ibn Riyab.
- ✓ Zaynab's mother was Umayma bint Abdul muttalib.
- ✓ Hazrat Zainab RA bint Jahsh was the daughter of the paternal aunt of the Holy Prophet Umaima bint Abdil Mutalib.
- ✓ Zainab bint Jaish (Surah Ahzab) was married to the Prophet through Allah's Servelation or well.
- ✓ Hazrat Zainab RA was died in 641 AD.

8. Hazrat Ummy Habiba RA:

- ✓ Hazrat Ummy Habiba RA was born in 594 AD.
- ✓ Hazrat Ummy Habiba RA was the sister of Ameer Muyawya RA who was the wife of Prophet SAW.
- ✓ Hazrat Ummy Habiba RA was the daughter of Abu Sufyan.
- ✓ Hazrat Ummy Habiba RA was first married to Ubaidullah bin Jahsh.
- ✓ Najashi was the king through which Prophet married to Ummay Habiba.
- ✓ Najashi was the king of Habshah.
- ✓ Ummul Momineen Ummay Habiba RA migrated to Abyssinia and Madina as well.
- ✓ Hazrat Ummy Habiba RA died at the age of approximately 74 and was buried in Jannatul Baqi.

9. Hazrat Safia RA:

- ✓ Hazrat Safia RA was born in 610 AD.
- ✓ Hazrat Safia RA Father's Name was Huyavy bin Akhtab.
- ✓ Hazrat Safia RA belong to Banu Nazir tribe.
- ✓ Ummul Momineen Hazrat Safia was the progeny of Hazrat Haroon.
- ✓ Hazrat Safia RA married to the Holy Prophet (PBUH) after the victory of Khyber.
- ✓ Hazrat Safia RA was the landlord of Banu Nazir and Banu Quraizah.
- ✓ Hazrat Safia RA died in 670 AD.

10. Hazrat Maimoona RA:

- ✓ Hazrat Maimoona RA Father's name was Haris ibn Hazn.
- ✓ Hazrat Maimoona RA Mother Name was Hind bint Auf.
- ✓ Hazrat Maimoona RA belongs to Tribe Hilal.
- ✓ Hazrat Maimoona RA Marriage to the Holy Prophet in 7 AH.
- ✓ The Holy Prophet (PBUH) married Hazrat Maimoona RA in the state of Ahram.

11. Hazrat Maria Qibtiya RA:

- ✓ Hazrat Maria Qibtiya RA born in 628 AD.
- ✓ Hazrat Maria Qibtiya RA Father's name was Shamun.
- ✓ Hazrat Maria Qibtiya RA birth place was Egypt.

- ✓ Hazrat Maria Qibtiya RA gave birth to **Hazrat Ibrahim**, son of Prophet (PBUH).
- ✓ **Hazrat Ibrahim** son of Hazrat Muhammad (PBUH) is buried in **Jannat ul Baki**.
- ✓ Hazrat Maria^m passed away in Muharram **16 AH** during the Khilafat of Hazrat Umar.

12. Hazrat Javairia RA:

- ✓ In the month of **Shahbaan 5 or 6 Hijri** Our Prophet (PBUH) married with Hazrat Javairia's.
- ✓ On the request of Hazrat Javairia RA (wife of Muhammad SAW) Prophet SAW released **seven hundred prisoners**.
- ✓ The Umm-ul-Momineen Hazrat Javairia's actual name was **Barrah**.

Islamic Months:

In their religious practice, Muslims follow the Islamic calendar which consists of twelve lunar months. Each month may be 29 or 30 days. On an average, there are 355 days in a lunar year. The fact that the lunar year has approximately ten days less than the solar year, brings an Islamic anniversary ten days ahead each year in the solar calendar.

- 1) **Muharram (S)** The first month of the Islamic calendar
- 2) **Safar**
- 3) **Rabi-ul-Awwal** The month of the Holy Prophet's birth, Hijrah and death.
- 4) **Rabi-ul-Sani**
- 5) **Jumada-l-Ula**
- 6) **Jumada-th-Thaniyya**
- 7) **Rajab (S)**
- 8) **Shaaban**
- 9) **Ramadhan:**
- 10) **Shawwal:** On the first day of this month Eid-ul Fitr is celebrated.
- 11) **Dhul Qadah (S)**
- 12) **Dhul Hijja (S)** The month in which the Hajj is performed and Eid-ul Adha is celebrated on the 10th of this month.

Pillars of Islam (Arkan ul Islam):

There are five fundamentals of Islam namely:-

- 1) Touheed (believe in Oneness of Allah)
- 2) Salat (Namaz)
- 3) Fasting/Saum (Roza)
- 4) Zakat
- 5) Hajj

KALIMAHS:

There are six Kalimas

- 1) Kalimah Tayab
- 2) Kalimah Shahdat
- 3) Kalimah Tamjeed
- 4) Kalma Tauheed
- 5) Kalimah Istighfar
- 6) Kalimah Rad-e-Kufr

FIRST KALIMAH:

✓ Name the 1st Kalimah?

- A. Kalimah-e-Tayyaba
- B. Kalimah-e-Shahadat
- C. Kalimah-e-Tamjeed
- D. Kalimah-e-Tauba

✓is the meaning of Tayyaba?

- A. Gatherness
- B. Softness
- C. Purity
- D. Acceptness

✓ Name the Kalimah which necessary for Muslim to recite?

- A. Kalimah-e-Shahdat
- B. Kalimah-e-Tayyaba
- C. Kalimah-e-Allah O Akbr
- D. Kalimah-e-Tamjeed

✓ "There is no god but Allah, Hazrat Muhammad (PBUH) is the messenger of Allah". It is a Translation of.....

- A. Kalimah-e-Tayyaba
- B. Kalimah-e-Shahadat
- C. Kalimah-e-Tamjeed
- D. Kalimah-e-Tauba

✓ There are....words in First Kalimah.

- A. Ten
- B. Nine
- C. Eight
- D. Seven

✓ How many dots are there in First Kalimah?

- A. Seven
- B. Four
- C. Two
- D. Nil

✓ There are..... Letters in the First Kalimah.

- A. 40
- B. 48
- C. 53
- D. 57

✓ How many times Kalima tayyiba is mentioned in The Holy Quran?

- A. 2
- B. 3
- C. 4
- D. 5

✓ The Recitation of "1st kalima" is called.....

- A. Tahleel
- B. Qerat
- C. Nijat
- D. Both A and B

SECOND KALIMAH:

✓ Name the 2nd Kalimah?

- A. Kalimah-e-Tamjeed
 B. Kalimah-e-Tauba
 C. **Kalimah-e-Shahadat**
 D. Kalimah-e-Astaghfar

✓is the meaning of Shahadat.

- A. Testimony
 B. Submission
 C. Witness to
 D. **All of the above**

✓ What is called a person who recites Kalimah of Islam verbally but disbelieve heartly?

- A. Murtad
 B. Mushrik
 C. **Munafiq**
 D. Mubah

THIRD KALIMAH:

✓ Name the 3rd Kalimah?

- A. **Kalimah-e-Tamjeed**
 B. Kalimah-e-Tauba
 C. Kalimah-e-Shadat
 D. Kalimah-e-Astaghfar

✓is the meaning of Tamjeed.

- A. **Glorification**
 B. Purity
 C. Testimony
 D. None of these

✓ Who is called Muratad?

- A. A person who leaves Islam after due to fear
 B. **A person who leaves Islam after accepting it**
 C. A person who leaves Islam after migration
 D. All of these

FOURTH KALIMAH:

✓ Name the 4th Kalimah?

- A. **Kalimah-e-Tauheed**
 B. Kalimah-e-Tauba
 C. Kalimah-e-Shadat

D. Kalimah-e-Astaghfar
 ✓is the meaning of Tauheed.

- A. Acceptness
 B. Rejection
 C. **Unity**
 D. None of these

✓ Which among the following recited during Hajj on the way to Mina?

- A. **Kalimah-e-Tauheed**
 B. Kalimah-e-Tauba
 C. Kalimah-e-Shadat
 D. Kalimah-e-Astaghfa

✓ A person who does not follow any religion is called.....

- A. Sinner
 B. **Atheist**
 C. Transgressor
 D. Defaulter

FIFTH KALIMAH:

✓ Name the 5th Kalimah?

- A. Kalimah-e-Tauheed
 B. Kalimah-e-Tauba
 C. Kalimah-e-Shadat
 D. **Kalimah-e-Astaghfa**

✓is the meaning of Astaghfar.

- A. Unity
 B. **Penitence**
 C. Glorification
 D. testimony

SIXTH KALIMAH:

✓ Name the 6th Kalimah?

- A. Kalimah-e-Tauheed
 B. Kalimah-e-Tauba
 C. **Kalimah-e-kufr**
 D. Kalimah-e-Astaghfar

✓is the meaning of Rad-l-Kufr.

- A. **Repudication of infidelity**
 B. Purity
 C. Unity
 D. Acceptness

SALAT / NAMAZ:

- ✓ Five Salat made compulsory?
- A. 8th Nabvi
 B. 10th Nabvi
 C. 9th Nabvi
 D. None of these
- ✓ Salat is the..... pillar of Islam.
- A. 1st
 B. 2nd
 C. 3rd
 D. 4th
- ✓ How many times Salah and Zakat come together in Quran?
- A. 30
 B. 31
 C. 32
 D. 33
- ✓ How many times commands to offer Salah or Quran Verses about Prayer?
- A. 72
 B. 90
 C. 432
 D. 700
- ✓ There are..... prayers mentioned with name in Quran.
- A. 2
 B. 3
 C. 4
 D. 5
- ✓ The parts of Salat which are compulsory are called?
- A. Farz
 B. Wajib
 C. Nafil
 D. Sunnat
- ✓ For Salat, Muslims must face in the direction of.....
- A. Madina
 B. Khana kaba
 C. Bait ul Maqadas
 D. None of these
- ✓ Qa'ada is?
- A. Sunnah
 B. Wajib
 C. Farz
 D. None of these
- ✓ Jalsa is?
- A. Sunnah
 B. Wajib
 C. Farz
 D. None of these
- ✓ Salat Ul Juma became farz in?
- A. Madina
 B. Makkah
 C. Both a & b
 D. None of these
- ✓ How many persons are required for Jamat Prayer?
- A. 4 persons
 B. 5 persons
 C. 3 person
 D. 2 Persons
- ✓ Takbeer-e-Tehrira is required to be said in Salat?
- A. Twice
 B. Once
 C. Thrice
 D. None of these
- ✓ There are..... conditions of salat?
- A. 3
 B. 5
 C. 7
 D. None of these
- ✓ How many items are wajib in prayer?
- A. 10
 B. 11
 C. 12
 D. 13
- ✓ How many items are Sunnat in prayer?
- A. 10
 B. 15
 C. 20

- D. 25
 ✓ Namaz-e-Juma is?
 A. Farz
 B. Wajib
 C. Sunnah
 D. None of these
- ✓ Takbeer-e-Tashreeq is recited in...
 A. Eid-ul-Fitr
 B. Juma Prayer
 C. Namaz-e-Janaza
 D. Eid-ul-Azha
- ✓ There aretypes of Sunnah.
 A. 2
 B. 3
 C. 4
 D. 5
- Explanation: 1) Mokda 2) Ghair Mokda**
- ✓ How many Nafli Salat is there?
 A. 2
 B. 3
 C. 4
 D. 5
- ✓ In Ghusal, Farz are.....& Sunnah are?
 A. 5,7
 B. 3,5
 C. 7,9
 D. 9,11
- ✓ In Wazu, Farz are.....& Sunnah are ?
 A. 3,14
 B. 3,15
 C. 4,14
 D. 4,15
- ✓ A Person who performs prayers alone is?
 A. Pious
 B. Munfarid
 C. Preacher
 D. Mujtahid
- ✓ Standing straight during Ruku is?
 A. Qaumaa
 B. Qa'ada

- C. Jalsa
 D. Waqfa
 ✓ Sitting straight in Salat?
 A. Qaumaa
 B. Waqfa
 C. Qa'ada
 D. Jalsa
- ✓ Qa'ada is.....
 A. Farz
 B. Sunnah
 C. Wajib
 D. None of these
- ✓ How many time(s) Takbeer-e-Tahreema is (are) to be said the Salat?
 A. 1
 B. 2
 C. 3
 D. 4
- ✓ Short pause between two (2) Sajdaas ?
 A. Jalsa
 B. Qa'da
 C. Waqfa
 D. Qaumma
- ✓ Jalsa is.....
 A. Farz
 B. Sunnah
 C. Wajib
 D. None of these
- ✓ A person comes after passing one Rakat is.....
 A. Madurak
 B. Mushrik
 C. Musbaq
 D. None of these
- ✓ Person who starts prayer with Imam?
 A. Madurak
 B. Mushrik
 C. Musbaq
 D. None of these

- ✓ How many times Salam is performed in the Salat?
- A. 4
B. 3
C. 2
D. 1
- ✓ There are.....Farz Raka'at are in five prayers in a day.
- A. 15
B. 17
C. 19
D. 21
- ✓ How many prayers were Farz initially in the history of Islam?
- A. 2
B. 3
C. 4
D. 5
- ✓ Eid Namaz is.....
- A. Farz
B. Sunnah
C. Wajib
D. None of these
- ✓ Holy Prophet offered 1st Eid prayer in?
- A. 1st A.H.
B. 2nd A.H.
C. 3rd A.H.
D. None of These
- ✓ Holy Prophet offered 1st Juma Prayer?
- A. 3rd A.H.
B. 1st A.H.
C. 2nd A.H.
D. None of these
- ✓ Namaz-e-Istisqa is for?
- A. Rain
B. Lunar Eclipse
C. Solar Eclipse
D. None of These
- ✓ Namaz-e-Khisof is for?
- A. Solar Eclipse
B. Lunar Eclipse
C. Rain
D. None of these
- ✓ Namaz-e-Kisooof is for?
- A. Rain
B. Lunar Eclipse
C. Solar Eclipse
D. None of these
- ✓ Total Rakat in Farz Prayers are.....
- A. 17
B. 48
C. 20
D. 40
- ✓ Total Farz in Namaz / Salat are....
- A. 17
B. 48
C. 20
D. 40
- ✓ How many Sajdahs are in Salat-e-Janaza?
- A. 0
B. 1
C. 2
D. 3
- ✓is performed at the occasion of lunar eclipse.
- A. Salat-e-Khisooof
B. Salat-e-Kisooof
C. Salat Tasbeeh
D. Salat Ishraq
- ✓is performed at the occasion of solar eclipse.
- A. Salat-e-Khisooof
B. Salat-e-Kisooof
C. Salat Tasbeeh
D. Salat Ishraq
- ✓ Salat-e-Istisqa is performed at the occasion of.....
- A. Solar eclipse
B. Fear
C. War
D. Shortage of rain

- ✓is offered for coming Hajat.
- Salat-e-Istakhara**
 - Salat-e-Tasbeeh
 - Salat-e-Ishraq
 - Salat-e-Kisoof
- ✓ Which was the first Mosque of Muslims?
- Nabvi
 - Harram
 - Quba**
 - None of these
- ✓ There areTakbeers in funeral prayer?
- 3
 - 4**
 - 5
 - 6
- SAUM / FAST / ROZA**
- ✓ Saum is Farz in?
- 2 A.H**
 - 4 A.H
 - 6 A.H
 - 8 A.H
- ✓ Saum is thefundamental pillar of Islam.
- 2
 - 3**
 - 4
 - 5
- ✓ What is the literal meaning of Soam?
- To fast
 - To worship
 - To purify
 - To stop**
- ✓ First ashra of Ramzan is
- Maghfirat
 - Rahmat**
 - Nijat
 - None of these
- ✓ Second Ashra of Ramzan is.....
- Nijat
 - Rahmat
 - Maghfirat**
 - None of these
- ✓ 3rd Ashra of Ramzan is
- Rahmat
 - Nijat**
 - Maghfirat
 - None of these
- ✓ Itikaf is a
- Farz
 - Sunna**
 - Nafal
 - All of the above
- ✓ Wajib means
- Ordained**
 - Ordinary
 - Both a & b
 - None of these
- ✓ Ramadan is also known as.
- Syed-us-Shuhood
 - Syed-us-Shuhoor**
 - Both a & b
 - None of these
- ✓ Tarawih means
- To Pray
 - To stay
 - To rest**
 - None of these
- ✓ Battle of Badar fought in Ramadan on
- 17th**
 - 18th
 - 16th
 - 15th
- ✓ Name of Baab-ul-Jannat fixed for Fast observers?
- Baab-e-Rayan**
 - Baab-e-Rehman
 - Baab-e-Aiman
 - Baab-e-Rizwan

31

- ✓ Atonment of breaking Fast is to feed people.
- A. 60
B. 50
C. 30
D. 40
- ✓ Ramazan is themonth os Islamic calendar.
- A. 7th
B. 8th
C. 9th
D. 10th
- ✓ Which Rukn-e-Islam is called a Sheld?
- A. Zakat
B. Salat
C. Hajj
D. Roza
- ✓ Fasting is commended in?
- A. Al-Ahzaab
B. Al-Baqarah
C. Al-Imran
D. None of These
- ✓ The cash equal to Kaffarah is also called.....
- A. Sadaga-e-fitr
B. Replacment
C. Charity
D. Infaq

ZAKAT:

- ✓ Meaning of Zakat?
- A. To pour
B. To purify
C. Both a & b
D. None of these
- ✓ Zakat become obligator in
- A. 5 A.H.
B. 2 A.H.
C. 3 A.H.
D. 4 A.H.
- ✓ Al Gharmain means.....
- A. Creditors

- B. Taker
C. Debtors
D. None of these
- ✓ Ushar on artificially irrigated land is
- A. 1/20th
B. 1/15th
C. 1/5th
D. 1/10th
- ✓ Zakat on produce of mines is
- A. 1/10th
B. 1/5th
C. 1/15th
D. 1/20th
- ✓ Fay is income from?
- A. Land
B. Agriculture Land
C. Both a & b
D. None of these
- ✓ Spoils of war.....
- A. Zakat
B. Khiraj
C. Ushr
D. None of these
- ✓ The word Zakat is mentioned in Quran?
- A. 22 times
B. 42 times
C. 32 times
D. 52 times
- ✓ Khuns means
- A. 1/9
B. 1/5
C. 1/10
D. 1/3
- ✓ Ushr means
- A. 1/10
B. 1/5
C. 1/3
D. 1/9
- ✓ Nisab of Zakat for Camels.
- A. 30

- B. 3
C. 5
D. 40
- ✓ Nisab of Zakat for Goats.....
A. 40
B. 3
C. 30
D. 5
- ✓ Nisab of Zakat for Cows.....
A. 5
B. 9
C. 3
D. 40
- ✓ In Quran, Zakat is mentioned along with Namaz.
A. 32 times
B. 14 times
C. 26 times
D. 28 times
- ✓ Heads for distributions of Zakat are?
A. 18
B. 10
C. 8
D. 6
- ✓ Injunctions for utilization of Zakat is in.....
A. Surah Tauba
B. Surah Muhammad
C. Surah Nooh
D. None of these
- ✓ Nisab for gold is tola.
A. 52 1/2
B. 6 1/2
C. 7 1/2
D. 5 1/2
- ✓ Nisab for silver is tola.
A. 52 1/2
B. 6 1/2
C. 7 1/2
D. 5 1/2

HAJJ:

- ✓ Dhul-hulaifah is away from Madinah.
A. 6.5 miles
B. 4 miles
C. 5.6 miles
D. None of These
- ✓ Dhul-Hulaifah is Meeqat for people of?
A. India
B. Pakistan
C. Bangladesh
D. Indonesia
- ✓ Afrad, Qar'ran, Tamattu?
A. Haji
B. Roza
C. Namaz
D. Kalma
- ✓ Tulbiah is stopped after?
A. Sa'ace
B. Rami
C. Both a & b
D. None of these
- ✓ Rami is held at?
A. Mina
B. Arafat
C. Muzdalfa
D. None of these
- ✓ Jamarat-al-Sughra is Jamarat.
A. Pending
B. Longest
C. Shortest
D. Jamarat-al-Uqba
- ✓ Jamarat nearest to Makkah?
A. Jamarat-al-Uqba
B. Pending
C. Longest
D. Shortest
- ✓ Pabbles are collected from?
A. Mina
B. Arafat

C. Muzdalfa

D. None of these

✓ Mughrib & Isha prayers offered together at.....

A. Muzdalfa

B. Mina

C. Arafaat

D. None of these

✓ In Quran, is called Scared monument.

A. Mina

B. Muzdalfa

C. Arafaat

D. None of these

✓ Muzdalfa is.....miles away from Mina.

A. 3

B. 3.5

C. 2

D. 2.5

✓ Muzdalfa ismiles away from Makah.

A. 4

B. 6

C. 7

D. 5

✓ Muzdalfa is a

A. Mountain

B. Desert

C. Plain

D. None of these

✓ After performing Say'ee, Hajjaj goes to

A. Arafaat

B. Mina

C. Muzdalfah

D. None of these

✓is commenced from Safa and ends at Marwa

A. Say'ee

B. Rami

C. Both a & b

D. None of these

✓ Portion between the door of Kaaba & Hajar-e-Aswad.

A. Mohtamim

B. Furqaan

C. Meezan

D. Multazim

✓ Multazim means?

A. Place of peace

B. Place of Holding

C. Both a & b

D. None of these

✓ Haji goes to multazim after completing.....rounds.

A. 3

B. 7

C. 5

D. 4

✓ There aretypes of tawaf.

A. 5

B. 5

C. 3

D. 4

✓ The place where offering Salat is same as offering salat in Kaaba is called

A. Hareem

B. Hateem

C. Yamaani

D. None of these

✓ Actual color of Hajar-e-Aswad was?

A. White

B. Grey

C. Black

D. None of these

✓ Hajar-e-Aswad means

A. Black Marble

B. Black Stone

C. Black Dust

D. None of these

✓ In Nooh's time Kaaba was disappeared due to

A. Storm

- B. Rain
 C. Flood
 D. Sonami
- ✓build Kaaba first in the Universe?
 A. Jibraeel
 B. Angels
 C. Adam
 D. None of these
- ✓ Kaaba was constructed beforeyears of creation of Adam?
 A. 2000 years
 B. 2200 years
 C. 1500 years
 D. 1000 years
- ✓ In Mawaqeeet, non-one can get in without
 A. Cap
 B. Ahraam
 C. Laggae
 D. Softy Kit
- ✓ Mawaqeeet iscircle around Kaaba.
 A. 4th
 B. 5th
 C. 3rd

- D. 2nd
 ✓ Makkah Mukarmah is.....circle around Kaaba.
 A. 3rd
 B. 5th
 C. 2nd
 D. 4th
- ✓ First & inner most circle around Kaaba is
 A. Masjid-e-Haram
 B. Meqaat
 C. Makkah Mukarmah
 D. None of these
- ✓said, Hajj is greatest for all worships.
 A. Ahmad Bin Hamba!
 B. Imam Malik
 C. Abu Hanifah
 D. None of these
- ✓ Hajjaj stay at Mina for a day & then at Arafaat and at Muzdalfah in the end, these stays are called
 A. Waquf
 B. Say'ee
 C. Rami
 D. None of these

H O L Y B O O K S

- ✓ There are four Holy books.

HOLY TAURAT:-----HAZRAT MUSA AS-----LANGAUGE-----HEBREW

- ✓ Taurat was the First revealed book.
- ✓ The law is the meaning of Taurat.
- ✓ Taurat is written in Hebrew language.
- ✓ The Holy Book Taurat was revealed to Prophet "Musa" (AS).
- ✓ The word Taurat occurs eighteen times in the Quran.
- ✓ The Holy book Taurat is called the Old Testament.
- ✓ A Taurat Scroll is the holiest book within Judaism, made up of the five books of Musa (AS).
- ✓ There are 304,805 letters in a Taurat Scroll.

HOLY ZUBUR: -----HAZRAT MUSA AS-----LANGAUGE-----HEBREW

- ✓ In Zubur divine book the Holy Prophet (PBUH) was called as Farooq.
- ✓ Zubur is written in Hebrew language.
- ✓ The Arabic word zabūr means "book" or "writing."
- ✓ The Holy Book Zubur was revealed to Prophet Dawood (A.S).
- ✓ In the Qur'an, the Zubur is mentioned by name only three times.

HOLY INJIL: -----HAZRAT ISSA (A.S) -----LANGAUGE-----ABRANI

- ✓ The Holy book Injil is called the New Testament.
- ✓ The Injeel or Bible was revealed on Hazrat Issa (A.S).
- ✓ The Holy book Injil is called the Gospal.
- ✓ In Injil book the Holy Prophet (PBUH) is named as Farqaleet.
- ✓ Holy book Injil was revealed in Abrani.
- ✓ The meaning of Injil is "Good News".

HOLY QURAN; HAZRAT MUHAMMAD (PBUH)-----LANGAUGE-----ARABIC

- | | |
|--|---|
| <p>✓ The Holy Quran was revealed on Hazrat Muhammad (PBUH).</p> <p>✓ First revealed surah was Al Alaq, 96 in arrangement</p> <p>✓ Quran was revealed in 23 year 5 months and 14 days.</p> <p>✓ The word Quran means read one.</p> <p>✓ 114 total number of Surah.</p> <p>86 Makki Surah.</p> <p>28 Madine Surah.</p> <p>✓ Surah means city of Refuge.</p> <p>✓ Total 558 Rukus in Quran.</p> | <p>✓ Al-Baqrah is the longest Surah.</p> <p>✓ Al- Kausar is the shortest Surah.</p> <p>✓ Al-Nass is the last surah.</p> <p>✓ 14 bows are in Quran.</p> <p>✓ First bow occurs in 9th Para i.e Al-Inaam Surah.</p> <p>✓ Five verses were revealed in the first wahy.</p> <p>✓ Namaz commanded in quran for 700 times.</p> <p>✓ The word Islam occurs 6 times in the Quran.</p> |
|--|---|

- ✓ Kalima Tayyaiba is mentioned in Quran for 2 times.
- ✓ 12 Ghazawahs described in Holy Quran.
- ✓ 25 prophets mentioned in holy Quran.
- ✓ Angles mentioned in Quran are 7.
- ✓ Names of Quran mentioned in Quran is 55.
- ✓ Word surah has occurred in Quran 9 times.
- ✓ Only Sahabi mentioned in Quran Zaid bin Haris. (surah ahzab)
- ✓ Paradise is mentioned in Quran for 150 times.
- ✓ Jibrael is mentioned in Quran for three times.
- ✓ Al-Imran is the surah in which Hajj is commanded.
- ✓ Al-Mudassar 2nd Revealed Surah.
- ✓ Al-Muzammil 3rd Revealed Surah.
- ✓ Al-Tauba does not start with Bismillah.
- ✓ Al-Namal contains two Bismillahs.
- ✓ Three surah starts with curse.
- ✓ 6666 is the number of Ayats.
- ✓ 29 total number of Mukata't.
- ✓ Hazrat Usman was the first Hafiz of the Holy Quran.
- ✓ Hazrat Khalid Bin Saeed, the first writer of Wahy.
- ✓ In surah Al-Saf, Holy prophet is addressed as Ahmed.
- ✓ Ghar-e-Sor is mentioned in Surah Al-Tauba.
- ✓ 5 Surhas start with Qul.
- ✓ Hazrat Umar RA proposed the compilation of Holy Quran.
- ✓ Al-Nasr is known as Surah Widah.
- ✓ Abdul Malik Marwan applied the dots in the Holy Quran.
- ✓ Hajjaj bin yousuf applied diacritical points in Quran.
- ✓ 8 Siharas starts with Bismillah.
- ✓ 37 total number of surah in last parah.
- ✓ Al- Baqrah and Surah Al-Nissa is spread over 3 Parahs.
- ✓ Al-Falq and Al-Nas revealed at the same time.
- ✓ 3 Surah stats with "Ya Ayananabiyau".
- ✓ City of Rome is mentioned in Holy Quran.
- ✓ Surah Yaseen is known as Heart of Quran.
- ✓ Surah Rehman is known as beauty of Quran.
- ✓ Last Surah reveled in Al-Nasr.
- ✓ Risalat means to convey message.
- ✓ Holy Quran consist 105684 words and 3236700 letters.
- ✓ 6 Surah start with the name of prophets.
- ✓ Surah maryam wholly revealed for a woman.
- ✓ There are 7 stages in Holy Quran.
- ✓ Number of Aayats in al-Bakar is 286.
- ✓ Longest Makki Surah is Aaraf.
- ✓ Second longest Surah is Ashrah/Al-Imran.
- ✓ Surah Kausar has 3 Aayats.
- ✓ First Surah compilation wise is Surah Fatiha.
- ✓ Fatiha means opening.
- ✓ Fatiha contains 7 aayats.
- ✓ Fatiha is also called Ummul Kitab.
- ✓ First surah revealed in Madina was surah Fatiha.
- ✓ Surah Fatiha revealed twice in Makkah & Madina.
- ✓ Meaning of Aayat is Sign.
- ✓ Stone mentioned in Quran is ruby (Yaakut).
- ✓ First Sajda occurs in 9th Para, Al-Inaam Surah.
- ✓ Longest Surah (al-Bakr) covers 1/12th of Quran.

- ✓ Madni Surahs are generally longer.
- ✓ Madni Surahs consist of 1/3rd of Quran.
- ✓ Makki Surahs consist of 2/3rd of Quran.
- ✓ Surah Ikhlas is 112 Surah of Quran.
- ✓ First complete Madni Surah is Baqarah.
- ✓ Surahs named after animals are 4 in number.
- ✓ Namal means Ant.
- ✓ Surah Inaam means Camel.
- ✓ Surah Nahl means Honey bee.
- ✓ Surah Ankaboot means spider.
- ✓ The major part of Quran is revealed at night time.
- ✓ Generally aayats of Sajida occur in Makki Surahs.
- ✓ 10 virtues are blessed for recitation of one word of Quran.
- ✓ Surah Anfal means Cave.
- ✓ In Namal two bismillah occur (2nds one is at aayat no:30)
- ✓ Surah Kahf means the cave.
- ✓ Muzammil means Wrapped in garments.
- ✓ Kausar means Abundance.
- ✓ Nasr means Help.
- ✓ Ikhlas means Purity of faith.
- ✓ Falak means Dawn.
- ✓ Un-Nass means Mankind.
- ✓ Al-alq means Clot of blood.
- ✓ Alm Nashrah means Expansion.
- ✓ Uz-zukhruf means Ornaments.
- ✓ Surah Rahman is in 27th Para.
- ✓ Bride of Quran is Rahman Surah.
- ✓ Surah Yasin is in 22th and 23rd Para.
- ✓ Present shape of quran is Taufeeqi.
- ✓ Quran is the greatest miracle of Prophet.
- ✓ First seven aayats of quran are called Tawwal.
- ✓ The alphabet Alf comes most of times
- and Alf, Zuwad Alphabet comes least number of times.
- ✓ Quran is also regarded as a manual of Science.
- ✓ Surah Alq is both Makki and Madni.
- ✓ Name of Muhammad is mentioned in Quran for 4 times.
- ✓ Adam is mentioned in Surah Aaraf.
- ✓ first Sindhi translation of Quran by Aakhund Azizullah Halai
- ✓ Torat means light.
- ✓ Zaboora means Pieces/ Book written in big letters.
- ✓ Injeel means Good news.
- ✓ 99 numbers of aayats describe Khatam-e- Nabuwat.
- ✓ Command against Juva & amputation of hands came 8th A.H
- ✓ In Surah Al-Nisa the commandment of Wuzu is present.
- ✓ Procedure of ablution is present in Surah Maidah.
- ✓ Interest was prohibited in 8th A.H.
- ✓ During ghazwa Banu Mustaliq the command of tayamum was revealed.
- ✓ Quran recited in Medina firstly in the mosque Nabuzdeeq.
- ✓ Quran verse abrogating a previous order is called Naasikh.
- ✓ First man to recite Quran in Makkah: Abdullah bin Masood.
- ✓ Forms of revelation granted to Prophet were 3 (wahi, Kashf, dream)
- ✓ First method of revelation of Quran Wahi.
- ✓ Kashf means Vision.
- ✓ Initially Quran was preserved in memory form.
- ✓ After Umar's death, copy of quran was passed on to Hafsa.
- ✓ Section of Paradise in which Prophets will dwell Mahmood.
- ✓ Doors of Hell are 7.

- ✓ Subterranean part of hell is Hawia.
- ✓ Number of angles of hell 19.
- ✓ Gate-keeper of hell Malik.
- ✓ Gate-keeper of heaven Rizwan.
- ✓ Place of heaven at which people whose good deeds equal bad deeds will be kept in Aaraf.
- ✓ A tree in hell emerging from its base is Zakoon.
- ✓ Name of the mountain of hell is Saud.
- ✓ Heaven on earth was built by Shadad.
- ✓ The word Islam has been used at 92 places in the holy quran.
- ✓ First revelation written by Khalid bin Saeed
- ✓ Last wahi written by Abi Ibn Kaaf.
- ✓ Last wahi came on 3rd Rabiul Awal 11 A.D
- ✓ In 15th Para the event of Miraj is mentioned.
- ✓ Except the name of Maryam the name of no other woman has come explicitly in the Quran.
- ✓ Iblees will not be punished with fire but with cold.
- ✓ Iblees's refusal to prostrate before man is mentioned in Kuran for 9 times.
- ✓ Iblees means "disappointed one".
- ✓ Al-Kausar relates to death of Qasim and Hazrat Abdullah
- ✓ Jibrail came 24 000 times into the court of the Prophet.
- ✓ Quran has been translated into fifty languages to date.
- ✓ The Earth and the Heaven were created by Allah in 6 days; it is described in Surah Yunus.
- ✓ Zaid bin Thabit collected the Quran in the form of Book.
- ✓ -Tarjumanul Quran Abdullah bin Abbas.
- ✓ In Surah Muzzamil verse 73 reading quran slowly and clearly is ordained.
- ✓ 4 Mosque mentioned in Holy Quran.
- ✓ Jibraeel is referred in Quran as Ar-rooh.
- ✓ In Quran Rooh-al-Qudus is Jibrael it means Holy Spirit.
- ✓ In Quran Rooh-al-Ameen is Jibrael.
- ✓ Incharge of Provisions is Mekaael.
- ✓ The angel who was sent to Prophets as a helper against enemies of Allah was Jibraeel.
- ✓ The Angel who sometimes carried Allah's punishment for His disobedients was Jibraeel.
- ✓ Taharat-e-Sughra is Wuzu.
- ✓ There are two types of Farz.
- ✓ Saloos-ul-Quran is Surah Ikhlas.
- ✓ Aroos-ul-Quran i.e bride of Quran is Al-Rehman.
- ✓ Meaning of Baqarah: The cow
- ✓ In Surah Waqiya the word Al-Quran ul Hakeem is used.
- ✓ Two Surahs are named with one letter heading.
- ✓ Surah Baqara & Ale Imran are known as Zuhraveen.
- ✓ Wine is termed in Quran as Khumar.
- ✓ The first authority for the compilation of Ahadis is.
- ✓ Sahih Bukhari contains 7397 Ahadis.
- ✓ Tarjama-ul-Quaran is written by Abdul-Kalam Azad.
- ✓ First Muslim interpreter of Quran in English is Khalifa Abdul Hakeem.
- ✓ Shah Waliullah Translated Holy Quran in Persian and Shah Rafiuddin in Urdu in 1776.
- ✓ Hafiz Lakhvi translated Holy Quran in Punjabi.
- ✓ Ross translated the Holy Quran in to English.

PROPHETS OF ISLAM:

HAZRAT ADAM (AS):

- ✓ Hazrat Adam (AS) is the first Prophet of Allah.
- ✓ Safiullah is the title of Hazrat Adam (AS).
- ✓ Adam is a word of Syriani language.
- ✓ The word "Adam" means "man".
- ✓ Hazrat Adam (AS) was created on Juma day.
- ✓ 10 Sahifas were revealed to Hazrat Adam (AS).
- ✓ Hazrat Adam (AS) landed in Sri Lanka on Adam's Peak Mountain.
- ✓ Hazrat Adam (AS) had 2 daughters and 3 sons.
- ✓ Kabeel killed Habeel because he wanted to marry Akleema.
- ✓ The first person to be put into hell will be Kabeel.
- ✓ Sheesh was youngest son of Hazrat Adam (AS).
- ✓ Age of Hazrat Adam (AS) at Sheesh's birth was 130 years.
- ✓ Hazrat Hawwa was (were) created to remove the loneliness of Hazrat Adam (AS).
- ✓ Hazrat Adam (AS) is also known as Abu-al-Bashr.
- ✓ Hazrat Adam (AS) from India to Makkah and fortyHajj.
- ✓ Iblees urged Hazrat Adam (AS) to taste the fruit of prohibited tree.
- ✓ Hazrat Adam (AS) was the first agriculture engineer and farmer.
- ✓ Prophet Hazrat Adam (A.S) built 1st mosque on earth.
- ✓ Height of Prophet Hazrat Adam (A.S) was 90 feet.
- ✓ Age of Prophet Hazrat Adam (A.S) was 950 years.
- ✓ Prophet Hazrat Adam (A.S) grave in Saudi Arabia.
- ✓ Prophet Sheesh (A.S) passed away at the age of 912 years.

HAZRAT NOAH (AS):

- ✓ Prophet Hazrat Noah (A.S) got prophethood at the age of 40.
- ✓ The title Abu ul Bashr Sani for Hazrat Noah (A.S).
- ✓ 80 people were with Prophet Hazrat Noah (A.S) in boat.
- ✓ Prophet Hazrat Noah (A.S) preached people for 950 years.
- ✓ Nation of Prophet Hazrat Noah (A.S) was exterminated through the Flood.
- ✓ Duration of Tofaan e Noah was 6 month.
- ✓ Grave of Prophet Hazrat Noah (A.S) is in Turkey.
- ✓ Nation of Hazrat Noah (A.S) worships 5 idols.
- ✓ Pigeon was sent for the search of land by Hazrat Noah.
- ✓ Hazrat Noah (A.S) called predecessor, Naji Ullah, Shaikh ul Ambiva.
- ✓ Abul ul Bashr sani is the title of Hazrat Noah (A.S).

HAZRAT IBRAHIM (AS):

- ✓ Hazrat Ibrahim (A.S) born at Amer near Euphrate (Iraq).
- ✓ Hazrat Ibrahim (A.S) Prophet was thrown into the fire by the order of Namrud.
- ✓ 40 days Prophet Hazrat Ibrahim (A.S) was in the fire.
- ✓ Azab of Mosquitoes was sent to the nation of Hazrat Ibrahim (A.S) Prophet.
- ✓ The title of Prophet Hazrat Ibrahim (A.S) is Khalil Ullah.
- ✓ Grave of Prophet Hazrat Ibrahim (A.S) is in Israel.
- ✓ Prophet Hazrat Ibrahim (A.S) is mentioned by name 69 times in the Holy Quran.
- ✓ Between 10 and 30 Sahifas were revealed to Hazrat Ibrahim (AS).
- ✓ Hazrat Ibrahim (A.S) was firstly ordered to migrate to Palestine.
- ✓ First wife of Hazrat Ibrahim (A.S) was Saarah.
- ✓ Second wife of Hazrat Ibrahim (A.S) was Haajirah.
- ✓ Age of Hazrat Ibrahim (A.S) at the time of his death 175 years.
- ✓ Hazrat Ibrahim (A.S) is buried at Hebron in Jerusalem.
- ✓ Hazrat Ibrahim (A.S) intended to sacrifice Ismaeel at Mina on 10th Zul Hajj.
- ✓ Hajra the wife of Hazrat Ibrahim (A.S) was daughter of Pharaoh of Egypt.
- ✓ Hazrat Ibrahim (A.S) was the Architect, owing to his construction of the Kaaba.
- ✓ Hazrat Ibrahim (A.S) invented comb.

HAZRAT ISMAEEL (AS):

- ✓ Hazrat Ismaeel (A.S) is called Abu-al-Arab.
- ✓ Mother of Hazrat Ismaeel (A.S) was Haajirah.
- ✓ Prophet Hazrat Ibrahim (A.S) was 86 years old when Hazrat Ismaeel (A.S) born.
- ✓ The title of Prophet Hazrat Ismaeel (A.S) was Zabih Ullah.
- ✓ Hazrat Ismaeel (A.S) discovered Hijr e Aswad.
- ✓ Hazrat Ismail (A.S) is mentioned 12 times in Holy Quran.
- ✓ Aisha is the name of Hazrat Ismail (A.S) Wife.
- ✓ Zam Zam emerged from beneath the foot of Hazrat Ismaeel (A.S).
- ✓ Zam Zam emerged in the Valley of Batha.
- ✓ Hazrat Ismail (A.S) was buried in Makkah.

HAZRAT LOOT (AS):

- ✓ Hazrat Loot (AS) was maternal grandfather of Hazrat Ayub (AS).
- ✓ Hazrat Loot (A.S) is mentioned 17 times in the Quran.
- ✓ Hazrat Loot (A.S) was the Nephew of Hazrat Ibrahim (A.S).
- ✓ Hazrat Loot (A.S) was the first to migrate.
- ✓ Hazrat Loot (A.S) migrated to Sodom and Gomorrhah.
- ✓ Hazrat Loot (A.S) was a historian. He is the father of all the travellers.
- ✓ Sarah, the wife of Hazrat Ibrahim (A.S) and mother of Hazrat Ishaq (A.S) was sister of Hazrat Loot (A.S).
- ✓ Grave of Prophet Hazrat Loot (AS) is in Iraq.

HAZRAT IDREES (A.S):

- ✓ Hazrat Idrees (A.S) was born in **Babylon**, a city in present-day **Iraq**.
- ✓ Hazrat Idrees (A.S) expert in **astronomy**.
- ✓ **2 times Hazrat Idrees (A.S)** is mentioned in **Holy Quran**.
- ✓ **722 languages** were understood by Prophet Hazrat Idrees (A.S).
- ✓ **30 Sahifas** were revealed to **Hazrat Idris (AS)**.
- ✓ Hazrat Idrees (A.S) met with Holy Prophet (SAW) on the **4th heaven**.
- ✓ Hazrat Idrees (A.S) was directed by Allah to migrate to **Egypt**.
- ✓ **Hazrat Idrees (A.S)** was the first who **learnt to write**.
- ✓ Hazrat Idrees (A.S) was the first to invent the **needle**.
- ✓ Hazrat Idrees (A.S) set up **180 cities**.
- ✓ **Hazrat Idrees (A.S)** died **in the wings of the angel**.

HAZRAT YOUNUS (A.S):

- ✓ Hazrat Younus (A.S) is mentioned **4 times** in the **Holy Quran**.
- ✓ Hazrat Younus (A.S) lived in **Nineveh, Iraq**.
- ✓ Hazrat Younus A.S was born in **9th century BCE**.
- ✓ Younus prayed {أَنْ لَا إِلَهَ إِلَّا أَنْتَ سُبْحَانَكَ إِنِّي كُنْتُ مِنَ الظَّالِمِينَ} in the belly of fishoh
- ✓ **Zun-noon, Lord of Fish** and **Sahib-ul-Hoot** is the **title** of **Hazrat Younus (A.S)**.
- ✓ Hazrat Younus (A.S) was a **Hebrew Prophet**.
- ✓ Hazrat Younus (A.S) was selected as a messenger of Allah at the age of **30 years**.
- ✓ **Whale swallowed** Hazrat Younus (A.S).

HAZRAT ISHAQ (A.S):

- ✓ Hazrat Ishaq (A.S) is mentioned **16 times** in **Holy Quran**.
- ✓ Hazrat Ibrahim (A.S) was the **Father** of **Hazrat Ishaq (A.S)**.
- ✓ **Sarah** Was the **Mother** of **Hazrat Ishaq (A.S)**.
- ✓ **Rebecca** was the **wife** of Hazrat Ishaq (A.S).
- ✓ Hazrat Ishaq (A.S) lived in Palestine with his Father Hazrat Ibrahim (A.S) and **built** the boundaries of **Masjid-e-Aqsa**.
- ✓ Hazrat Ishaq (A.S) was a **shepherd**.
- ✓ Hazrat Ishaq (A.S) is known as the **fore-father** of **Jews**.
- ✓ Hazrat Ishaq (A.S) was the **younger brother** of **Hazrat Ismael (A.S)**.
- ✓ **Hazrat Ishaq (A.S)** lost his eye sight in old age.
- ✓ **100 years** age of **Hazrat Ibrahim (A.S)** at the time of **birth of Hazrat Ishaq (A.S)**.
- ✓ **90 years** the age of Hazrat **Sarah** at the time of birth of **Hazrat Ishaq (A.S)**.
- ✓ **Hazrat Sarah**, the **mother** of Hazrat Ishaq (A.S) was sister of **Hazrat Loot (A.S)**.
- ✓ **Hazrat Ishaq (A.S)** was sent to **Jews**

HAZRAT DAWOOD (A.S):

- ✓ Hazrat Dawood (A.S) could mould iron easily with his hand.
- ✓ Prophet Hazrat Sulaiman and Prophet Hazrat Dawood (A.S) understood the language of birds.
- ✓ Prophet Dawood (A.S) has the title Najeeb Ullah.
- ✓ Grave of Hazrat Dawood (A.S) is in Israel.
- ✓ Adam & Dawood are addressed as Khalifa in Quran.

HAZRAT MOOSA (A.S):

- ✓ The Title of Prophet Hazrat Moosa (A.S) was Kaleem Ullah.
- ✓ Prophet Hazrat Moosa (A.S) was granted 9 Miracles.
- ✓ Prophet Hazrat Moosa (A.S) crossed the Red Sea.
- ✓ Elder brother of Prophet Hazrat Moosa (A.S) was Haroon.
- ✓ Prophet Hazrat Moosa (A.S) had only one brother.
- ✓ Tur-e-Sina was the mountain where Prophet Hazrat Moosa (A.S) received Allah message.
- ✓ Teacher of Hazrat Moosa (A.S) was Shoib.
- ✓ An Egyptian was killed by Hazrat Moosa (A.S).
- ✓ Hazrat Moosa (A.S) had impediment in his tongue.
- ✓ Hazrat Moosa (A.S) died on Abareem Mountain.
- ✓ Grave of Hazrat Moosa (A.S) is in Israel.
- ✓ Hazrat Moosa (A.S) married the daughter of Shoib.

HAZRAT SHOAIB (A.S):

- ✓ Hazrat Shoaib (A.S) is mentioned 11 times in the Holy Quran.
- ✓ Hazrat Shoaib (A.S) was an Arab Prophet.
- ✓ Hazrat Shoaib (A.S) is also known as Khateeb-ul-Ambiya.
- ✓ Hazrat Shoaib (A.S) was sent to the people of Madyan.
- ✓ Hazrat Musa (A.S) married the daughter of Hazrat Shoaib (A.S).
- ✓ Hazrat Shoaib (A.S) was also an agriculturalist.
- ✓ Hazrat Shoaib (A.S) lived between the time of Hazrat Loot (A.S) and Hazrat Moosa (A.S).
- ✓ People of Hazrat Shoaib (A.S) worshiped a tree called Al-Aykah.
- ✓ The grave of Hazrat Shoaib (A.S) is in Jordan.

HAZRAT AYUB (A.S):

- ✓ Hazrat Ayub (A.S) was famous for his Patience.
- ✓ Hazrat Ayub (A.S) is mentioned 4 times in the Holy Quran.
- ✓ Hazrat Ayub (A.S) is said to have lived close to either the Dead Sea or Damascus.
- ✓ Hazrat Ayub (A.S) suffered from Skin Disease.
- ✓ Hazrat Ayub (A.S) suffered from Skin Disease for 18 years.

- ✓ The grave of Hazrat Ayuob (AS) is in Amman.
- ✓ Four Prophets send to Bani Israil.

HAZRAT SALEH (AS):

- ✓ Prophet Hazrat Saleh (A.S) invented Soap.
- ✓ Hazrat Saleh (A.S) is mentioned 9 times in Holy Quran.
- ✓ Hazrat Saleh (A.S) was an Arab prophet.
- ✓ Hazrat Saleh (A.S) was sent to the people of Samood.
- ✓ Miracle of Dromedary (camel) is concerned with Hazrat Saleh (A.S).
- ✓ Miracle of pregnant female camel was sent to the nation of Samood.
- ✓ People of Samood lived in an area known as Al-Hijr.

HAZRAT ESA (AS):

- ✓ Baitul Laham is the birth place of Prophet Esa (A.S) is situated in Jerusalaem.
- ✓ Hazrat Esa (AS) will return to earth near the Day of Judgement in order to fight in a battle against Dajal.
- ✓ Holy Book Injil was revealed to Hazrat Isa (AS).
- ✓ Injil was bestowed on Hazrat Isa (AS) on 12 Ramadan.
- ✓ Hazrat Esa (AS) was born without a father.
- ✓ Hazrat Maryam is the name of Hazrat Isa (AS) mother.
- ✓ Hazrat Esa (AS) was sent to preach the message of Allah to the people of Israel.
- ✓ Reviving the Dead miracle given to Hazrat Esa (AS) by Allah.
- ✓ Prophet Esa (A.S) was the cousin of Prophet Yahya (A.S).
- ✓ Prophet Esa (A.S) has the title Rooh Ullah.
- ✓ Prophet Esa (A.S) was carpenter by profession.
- ✓ Hazrat Isa (A.S) met with Holy Prophet (SAW) on the 2nd heaven.
- ✓ Hazrat Esa (A.S) lifted alive.

HAZRAT YOUSUF (AS):

- ✓ Prophet Yousuf (A.S) was the son of Hazrat Yaqoob (A.S).
- ✓ Prophet Yousuf (A.S) is a prophet who first invented the clock and first to establish an office for agricultural products, and who stocked in abundance and distributed to public in scarcity.
- ✓ Mother of Yousuf was Rachel.
- ✓ Yaqoob lost his eye-sight in memory of Yousuf.
- ✓ Real brother of Yousuf was Bin Yamen.
- ✓ Yousuf's family was called the Israeelites.
- ✓ Prophet Yousuf (A.S) was sold as a slave in Egypt.
- ✓ Prophet Yousuf (A.S) had 11 brothers.
- ✓ Prophet Yousuf (A.S) and Prophet Yaqoob (A.S) met each other after 40 years.
- ✓ Prophet Yousuf (A.S) is famous for his beauty.
- ✓ Prophet Yousuf (A.S) knew facts about dreams.

G H A Z W A T:**(غزوات)**

The Muslims fought the total of twenty eight (28) battles during the life of the Prophet Mohammed (PBUH) from which some were fought by the Prophet Mohammad (PBUH) himself and from which some were lead and/or participated by the Prophet Mohammed (PBUH) which are:

- | | |
|--|---|
| 1) The battle of Waddan (1 Hijri). | 15) The battle of Badr Al-Akherah (4 Hijri). |
| 2) The battle of Bawat (2 Hijri). | 16) The battle of Domat-Ul-Gandal (5 Hijri). |
| 3) The battle of Al-Asherah (2 Hijri). | 17) The battle of Al-Khandaq (5 Hijri). |
| 4) The battle of Badr (2 Hijri). | 18) The battle of Bani Al-Mustalaq (5 Hijri). |
| 5) The battle of Badr Al-Kubrah (2 Hijri). | 19) The battle of Bani Qurayzah (5 Hijri). |
| 6) The battle of Bani Saleem (2 Hijri). | 20) The battle of Bani Lehyan (6 Hijri). |
| 7) The battle of Bani Qaenaqaa' (2 Hijri). | 21) The battle of The Qird (6 Hijri). |
| 8) The battle of Al-Saweeq (2 Hijri). | 22) The battle of Al-Hudaybeyah (6 Hijri). |
| 9) The battle of the Amr (3 Hijri). | 23) The battle of Khaibar (7 Hijri). |
| 10) The battle of Bahran (3 Hijri). | 24) The battle of Umrat Al-Qadaa' (7 Hijri). |
| 11) The battle of Uhud (3 Hijri). | 25) Fath Mekkah (8 Hijri). |
| 12) The battle of Hamraa' Al-Asad (3 Hijri). | 26) The battle of Haneen (8 Hijri). |
| 13) The battle of Bani Al-Nazeer (4 Hijri). | 27) The battle of Al-Taa'ef (8 Hijri). |
| 14) The battle of That Al-Reqaa' (4 Hijri). | 28) The battle of Tabuk (9 Hijri). |

Twenty seven (27) battles from the twenty eight (28) battles were fought with the attendance of the Prophet Mohammed (PBUH) himself not as a fighter, but rather a leader or something else with only nine (9) of them being fought by the Prophet Mohammed (PBUH) himself using his sword which are:

- ❖ The battle of Badr (2 Hijri).
- ❖ The battle of Uhud (3 Hijri).
- ❖ The battle of Al-Khandaq (5 Hijri).
- ❖ The battle of Banu Qurayzah (5 Hijri).
- ❖ The battle of Al-Mustalaq (5 Hijri).
- ❖ The battle of Khaybar (7 Hijri).
- ❖ Fath Mekkah (8 Hijri).
- ❖ The battle of Haneen (8 Hijri).
- ❖ The battle of Al-Ta'ef (9 Hijri).

THE BATTLE OF BADR:

(غزوه بدر)

- ✓ Another name of the Battle of **Badr** is **Ghazwa Kubra**.
- ✓ **Ghazwa Badr** was an important event that took place on the **17th Ramazan, 2nd Hijrah**.
- ✓ **Ghazwa Badr** is named as **Yoom-ul-Furqan**.
- ✓ The Battle of **Badr** took place in **624 AD**.
- ✓ There were **1000 infidels** in the Battle of **Badr**.
- ✓ **70 infidels** were killed in the **Battle of Badr**.
- ✓ **70 prisoners** were captured in the **Battle of Badr**.
- ✓ There were **313 Muslims** in the Battle of **Badr**.
- ✓ The colour of the flag of the **Islamic army** in **Ghazwa Badr** was **White**.
- ✓ In the Battle of Badr, **Abu Jehl** was killed.
- ✓ Badr is a **Valley**.
- ✓ Badr is located near the **Madina**.
- ✓ Badr is **80 miles** away from **Madina**.
- ✓ In **Battle Badr** the **heavy rain** helped Muslims by Allah.
- ✓ **Hazrat Ubaidah (RA)** was the **oldest in age** and was in the front line in **Battle of Badr**.
- ✓ The Battle of Badr is mentioned in **Surah Aal-e-Imran** of the Holy Quran.
- ✓ **Aqel Bin Abi Talib** was the **brother** of **Hazrat Ali (RA)** who was taken as prisoner in the **Battle of Badr**.
- ✓ **Abbas** was the **uncle** of the **Holy Prophet (PBUH)** who was taken as prisoner in the **Battle of Badr**.
- ✓ **Abul Aas** was the **son-in-law** of the **Holy Prophet (PBUH)** who was taken as prisoner in the **Battle of Badr**.
- ✓ **Abu Jehl** was the **leader** of pagans in the **Battle of Badr**.

THE BATTLE OF UHAD:

(غزوه أحد)

- ✓ **Ghazwa-e-Ohad** took place in **3 Hijrah**.
- ✓ Ohad is located **3 miles** away from **Madina**.
- ✓ **Ohad** is a **Hill**.
- ✓ In **North** direction of **Madina**, **Ohad** is located.
- ✓ **1000 Muslims** participated in the **Battle of Ohad**.
- ✓ **300 persons** were accompanied with **Abdullah Bin Ubai**.
- ✓ **Abdullah Bin Ubai** was **Munafiq**.
- ✓ **70 Muslims** were **martyred** in the **Battle of Ohad**.
- ✓ **40 Muslims** were **injured** in the **Battle of Uhad**.
- ✓ In the Battle of Uhad **3000 pagans** of Makkah participated.

- ✓ In **Ohad Battle**, Muslim **ladies** provided **first aid** to the Muslim fighters.
- ✓ **Hazrat Hamza (RA)** was martyred in the **Battle of Ohad**.
- ✓ **Hazrat Zaid bin Thabit (RA)** was the leader of "Teer Andaz Dasta" at Jabal-e-Yahene in the Battle of Ohad.
- ✓ The leader of the enemy cavalry, in the Battle of Ohad was **Khalid Bin Waleed**.
- ✓ The daughter of **Utba** was **Hinda** who accompanied the army of pagans in the **Battle of Ohad**.
- ✓ The **teeth** of the **Holy Prophet (PBUH)** were martyred in the **Battle of Ohad**.
- ✓ **50 Muslims** were posted to protect the pass in the **Ohad Mountain**.
- ✓ In the **Battle of Ohad**, **Abu Sufyan** was the commander in chief of infidels.
- ✓ **Ohad** was the Battle in which Muslims suffered **heavy losses**.

THE BATTLE OF TRENCH:

(غزوه خندق)

- ✓ The Battle of **Trench** was fought in **5 A.H.**
- ✓ The **Battle of Trench** took place in **627 AD.**
- ✓ **Trench** is also called **Ghazwa Ahzab.**
- ✓ **Battle of Trench** took place after the **Battle of Ohad.**
- ✓ **3000 Sahabas (RA)** worked along with Hazrat Muhammad (SAW) to dig up the trench.
- ✓ **6 Muslims** were **martyred** in the **Battle of Trench.**
- ✓ The strength of the pagans armies is estimated around **10,000 men** with **three hundred horses** and **one thousand camels.**
- ✓ **10 pagans** were **killed** in the **Battle of Trench.**
- ✓ In Ghazwa-e-Khandaq the length of trench was about **4 miles**, width **15 feet** and depth **15 feet.**
- ✓ **20 days** took to dig the Khandaq.
- ✓ The Holy Prophet (PBUH) ordered to digging of trench on the border of **Syria.**
- ✓ The tribe which broke the treaty with the Holy Prophet (SAW) in the Battle of Trench was **Banu Quraizah.**
- ✓ **Hazrat Salman Farsi (RA)** proposed to dig a trench.
- ✓ The piercing blast of cold wind blew in the **Battle of Ahzab.**
- ✓ The surah which describes Ghazwa-e-Khandaq is **Surah-al-Ahzab.**
- ✓ In Ghazwa Ahzab **Hazrat Safia (RA)** killed a **Jew.**
- ✓ The meaning of **Ahzab** is **Groups.**
- ✓ The religion of Banu Quraizah was Judaism.
- ✓ The **diplomatic efforts** of **Naeem bin Masood** were successful in the **battle of Khandaq.**

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- ✓ After the Battle of Trench, the **Banu Quraizah** agreed to abide by the decision of the man of their own tribe namely **Hazrat Sa'ad Bin Ma'az (RA)**.
- ✓ In **Khandaq battle** many **salats** were **missed** and offered later on.

THE BATTLE OF KHAYBAR:

(غزوه خيبر)

- ✓ The Battle of **Khaybar** was fought in **7 A.H.**
- ✓ The battle of Khyber was fought in the year **628 AD.**
- ✓ **Khyber** is located near **Madina.**
- ✓ The tribe of **Jews** which broke the treaty was **Banu Qainqa.**
- ✓ **Khyber** is situated **96 miles** from **Madina.**
- ✓ The center of **Jewish population** in Arabia was **Khyber.**
- ✓ **1600** companions (RA) accompanied the Holy Prophet (SAW) against the **Jews** of Khyber.
- ✓ In the **Battle of Khyber** a famous wrestler **Marhab** was murdered by **Hazrat Ali (RA).**
- ✓ The **Tribe** which **settled in Khyber** after leaving Madina was **Banu Nuzair.**
- ✓ Khyber was captured in **20 days.**
- ✓ The Jews agreed to give **50%** of produce to the Muslims after the Khyber expedition.
- ✓ **Munafiqeen** tried to create disruption between the two main tribes of Madina, the AOs and the Khazraj.
- ✓ The Slogan of Muslims in Battle of Khayber was "**Allah Akbar**".
- ✓ There are **20 women** are participated in the battle of Khayber from Muslims side.
- ✓ Ummul Momineen **Hazrat Um-e-Salma** was participated in **Battle of Khayber.**

FATH MEKKAH:

(فتح مکہ)

- ✓ In **8th Hijra**, the conquest of Makkah took place.
- ✓ Holy Prophet (PBUH) recited Surah **Al-Fatha** at the conquest of Makkah.
- ✓ Prophet stayed at Makkah for **15 days** after its conquest

THE BATTLE OF HANEEN:

(غزوه حنين)

- ✓ The Battle of **Hunain** was fought in **8 A.H.**
- ✓ **12 thousand** Muslims participated in the **Battle of Hunain.**
- ✓ The strength of disbelievers **4000.**
- ✓ Hunain is the name of **Valley.**
- ✓ **10 mile** away Hunain from **Makkah.**

- ✓ In **9 A.H.**, there was a **famine** in **Makkah**.
- ✓ **Ghazwa Awutas** is the other name of Ghazwa-e-Hunain (Battle of Hunain).
- ✓ **Malik bin awuf An-Nadri** was the **leader** of the army from disbelievers.
- ✓ **Hawazin, Saqaif, Taif** were the tribe of enemy in the **Battle of Hunain**.
- ✓ In **Ghazwa Hunain** Muslims were in majority as compared to enemy.
- ✓ Muslim saw the signs of defeat because **they were pride on their strength**.
- ✓ **Ghazwa Hunain** was fought against the **Arab tribes**.

THE BATTLE OF AL-TA'EF:

(غزوه طائف)

- ✓ **Ta'ef** is one of the fertile country towns of the **Hijaz**.
- ✓ The siege of Taef was laid in **9 A.H.**
- ✓ The Arabs of Saqif tribe was amongst those people, who fought against Islam in the **Battle of Hunayn**.

THE BATTLE OF TABOOK:

(غزوه تبوك)

- ✓ **Tabook expedition** took place in **9 A.H.**
- ✓ **30,000 Muslims** were in **Battle of Tabook**.
- ✓ For **20 days** the Holy Prophet (PBUH) stayed at Tabook.
- ✓ **Tabook expedition** was the **last expedition** in which the Holy Prophrt (PBUH) personally took part.
- ✓ In **Ghazwa Tabook** Muslims came back **without fight**.
- ✓ The age of the Holy Prophet (PBUH) in the Battle of Tabook was **61 years**.
- ✓ Ghazwa Tabook was fought against **Romans**.
- ✓ The main reason of the battle of Tabook was **Mischief of Romans**.
- ✓ Tabook is situated between **Madina & Damascus**.
- ✓ The Battle after which the siege of **Taif** was laid was Tabook Expedition.
- ✓ The flagman of Islamic army was **Hazrat Umar (RA)**.

COMPUTER

Chapter 1 Introduction to Computer

- The most common form in which a modern computer is found today is called:
 - Super
 - Mainframe
 - Personal**
 - Notebook
- A computer's main function is to:
 - Convert information into storage
 - Convert data into information**
 - Display data
 - Create data from information
- Which of the following mathematician created the logarithm tables to facilitate calculations?
 - John Napier**
 - Von Neumann
 - Charles's Babbage
 - John Eckert
- Charles Babbage conceived the first computer known as _____ Engine.
 - Encoding
 - Pattern
 - Analog
 - Analytical**
- Howard Aiken developed:
 - ABC
 - ENIAC
 - UNIVAC I
 - MARK I**
- During World War II, Mauchly and Eckert Constructed the:
 - ABC
 - ENIAC**
 - UNIVAC I
 - MARK I
- The process of storing the programs and data in memory is called:
 - CPU
 - Fixed disk
 - Data processing
 - Stored-program concept**
- The idea of storing a program and data in memory was suggested by:
 - John von Neumann**
 - Dr. Qadeer
 - Dr. Abdul Salam
 - Pascal.
- First-generation computers used:
 - Microprocessor
 - Transistor
 - Integrated Circuit
 - Vacuum tube**
- Second-generation computers used:
 - Integrated circuits
 - Transistors**
 - Vacuum tubes
 - Microprocessors
- The first electronic digital computer was:
 - ABC Computer
 - ENIAC**
 - MARK I
 - UNIVAC I
- The Electronic Numerical Integrator and Computer was composed of:
 - Vacuum tubes**
 - Transistors
 - IC
 - Microprocessor
- The fourth-generation computers used:
 - Microprocessor**
 - Transistor
 - Integrated circuit
 - Vacuum tube
- The first microprocessor were created using:
 - Vacuum tubes
 - Integrated circuits**
 - Digital divider
 - Difference engine
- Which of the following is an example of fourth generation computer?
 - IBM PC
 - Apple Macintosh
 - IBM 370
 - Both a and b**
- Which of the following is true about IC?
 - Invented in 1961
 - 1/4 Square inch in size
 - Contains thousands of transistors
 - All**
- Which of the following scientist produced first microprocessor in 1971 for Intel?
 - Ted Hoff**
 - Von Neumann
 - John Eckert
 - Charles Babbage
- The first complete microprocessor to be located on a single chip was the:
 - Intel 4004**
 - Univac I
 - Athlon
 - COMPVAC
- Which of the following is true about microprocessor?
 - Developed by Ted Hoff
 - Contains IC
 - Less then one square inch in size
 - All**
- The computer that marked the beginning of commercial computer age was called.
 - ENIVAC
 - UNIVAC**
 - DECVAC
 - COMPVAC
- The IBM 360 series was introduced in:
 - First generation
 - Second generation
 - Third generation**
 - Fourth generation
- Transistors had the following advantages over vacuum tubes:

- (a) Smaller size (b) Greater speed
(c) Less heat generation (d) All
23. Which company created the standard that is followed by most PC manufacturers?
(a) Compaq (b) Apple
(c) **IBM** (d) MITS
24. Apple and PC are types of:
(a) Mainframe computer (b) Super computer
(c) **Desktop computer** (d) Minicomputer
25. The most common operating system for PC is
(a) DOS (b) **Windows** (c) Unix (d) Linux
26. All of the following are considered to be personal computers (PCs) EXCEPT:
(a) Desktop computer (b) Laptop computer
(c) Pocket computer (d) **Mainframe computer**
27. Which one of the following is a portable computer?
(a) Mainframe computer (b) Desktop computer
(c) **Laptop computer** (d) Supercomputer
28. LCD stands for:
(a) **Liquid Crystal Display** (b) Linear Crystal Display
(c) Layered Crystal Display (d) Long Crystal Display
29. All of the following are computer classifications EXCEPT:
(a) Mainframe computer (b) Minicomputer
(c) Laptop computer (d) **Maxicomputer**
30. Which of the following computer is most powerful?
(a) Micro computer (b) Minicomputer
(c) Mainframe Computer (d) **Supercomputer**
31. Which of the following computer is an example of mainframe computer?
(a) **IBM S/390** (b) Cray T90
(c) HP 3000 (d) IBM-PC
32. HP 3000 is an example of:
(a) Super computer (b) **Minicomputer**
(c) Microcomputer (d) Pocket computer
33. Which of the following computer is an example of supercomputer?
(a) IBM S/390 (b) **Cray T90**
(c) HP 3000 (d) IBM-PC
34. Which computer is the best for use at home?
(a) Supercomputer (b) Mainframe computer
(c) **Laptop Computer** (d) Minicomputer
35. Which of the following device is an example of analog computer?
(a) Slide Rule (b) Harmonic Analyzer
(c) Curvimeter (d) **All**
36. Which of the following computer has the combined features of digital and analog computers?
(a) Digital computer (b) **Hybrid computer**
(c) Analog Computer (d) Laptop computer
37. A type of language in which instructions are written in binary form is called:
(a) **Machine language** (b) Assembly language
(c) High level language (d) English language
38. Writing programs in machine language is:
(a) Complex (b) Simple
(c) Time consuming (d) **Both a and c**
39. Writing programs in high-languages is _____ than machine language.
(a) Less time consuming (b) More time consuming
(c) Less simple (d) **Both a and c**
40. All of the following are high level languages EXCEPT?
(a) **Assembly language** (b) Pascal
(c) BASIC (d) FORTRAN
41. The lowest level of programming language is:
(a) Java (b) **Assembly Language**
(c) Pascal (d) C++
42. An assembly language uses:
(a) English words (b) **Mnemonic codes**
(c) OS and Is (d) Binary digit
43. Which of the following language is ideal to write business application?
(a) **COBOL** (b) BASIC
(c) Assembly language (d) Machine language
44. Who developed C?
(a) Von-Neumann (b) Al-Khuwarizmi
(c) Charles Babbage (d) **Dennis Ritchie**
45. Which of the following language was designed for artificial intelligence?
(a) PASCAL (b) C++
(c) **LISP** (d) COBOL
46. The UNIX Operating system was developed in

programming language?

- (a) COBOL (b) JAVA
(c) C (d) LISP

47. A programming language for mathematical and engineering applications was:

- (a) BASIC (b) FORTRAN
(c) Assembly (d) COBOL

48. Which of the following languages is an object-oriented language?

- (a) COBOL (b) Assembly
(c) C++ (d) BASIC

49. Visual Basic is a product of:

- (a) Microsoft (b) IBM
(c) Sun System (d) Hewlett

50. Java was introduced by:

- (a) Microsoft (b) IBM
(c) Sun System (d) Hewlett

51. Which of the following translates source code to machine code as a whole?

- (a) Interpreter (b) Compiler
(c) Assembler (d) Linker

52. Which program translates and executes one line of source code at a time?

- (a) Compiler (b) Assembler
(c) Interpreter (d) Linker

53. The output of the compiler is called:

- (a) Library code (b) Source code
(c) Linked code (d) Machine code

54. A general-purpose, single-user computer is referred to as a(n).

- (a) Supercomputer (b) Personal computer
(c) Terminal (d) Minicomputer

55. A program errors is checked by:

- (a) Translator (b) Loader
(c) Debugger (d) Accumulator

56. The banks provide the facility of:

- (a) CAD (b) CAM (c) ATM (d) CBT

57. Java offers:

- (a) Network programming (b) Internet Applications
(c) GUI (d) All

58. C was developed in the year:

- (a) 1970 (b) 1972 (c) 1976 (d) 1995

59. Typically, an ATM can be used to:

- (a) Keep records (b) Make budgets
(c) Watch Movies (d) Withdraw cash

60. A type of reader commonly used to read UPC is called

- (a) Barcode reader
(b) Optical-mark reader
(c) Magnetic-ink character reader
(d) Both a and c are correct

61. A sequence of lines that is read a barcode reader is called:

- (a) UPC (b) OCR (c) OMR (d) MICR

62. How many generations of a computer can be classified?

- (a) 2 (b) 3 (c) 5 (d) 7

Chapter 2 Computer Components

1. Computer is a combination of:

- (a) Software (b) Hardware
(c) Both a and b (d) Procedure

2. Hardware is best described as:

- (a) Physical parts (b) Printed output
(c) A program (d) Logical part

3. All of the following are hardware components of computer EXCEPT:

- (a) Input unit (b) Output unit
(c) System Unit (d) Software

4. Which of the following is an input device?

- (a) Keyboard (b) Mouse
(c) Microphone (d) All

5. Which of the following input device is used to enter text data?

- (a) Keyboard (b) Mouse
(c) Microphone (d) Scanner

6. Which of the following input is used to enter voice data?

- (a) Keyboard (b) Mouse
(c) Microphone (d) Scanner

7. Which of the following is an output device?

- (a) Monitor (b) Printer
(c) Speaker (d) All

8. The mother board of a PC contains:
 (a) Processor chip (b) Memory chip
 (c) Ports (d) **All**
9. All of the following are output devices EXCEPT:
 (a) **Scanner** (b) Printer
 (c) Monitor (d) Speaker
10. The two major category of software are:
 (a) **Application and system**
 (b) System and design
 (c) Application and design
 (d) System and design
11. Software that controls and manages actual operations of hardware is called:
 (a) Applications software
 (b) **System software**
 (c) Software package
 (d) Software suite
12. Which of the following is system software?
 (a) Operating system (b) Utility program
 (c) Language translator (d) **All**
13. All of the following are types of application software EXCEPT:
 (a) Word Processor (b) Spreadsheet
 (c) Database (d) **Operating system**
14. CPU is an example of:
 (a) Software (b) Program
 (c) **Hardware** (d) Language
15. The brain of the computer that executes program instructions is called.:
 (a) **CPU** (b) RAM
 (c) Motherboard (d) System unit
16. CPU is also called the:
 (a) **Processor** (b) Controller
 (c) Main memory (d) Utilizer
17. CPU stands for:
 (a) **Central Processing Unit**
 (b) Central Product Unit
 (c) Computing Program Usage
 (d) Central Programming Unit
18. CU stands for:
 (a) **Control Unit** (b) Cache Unit
 (c) Calculating Unit (d) Communication Unit
19. CPU includes all of the following components except:
 (a) **Main Memory** (b) ALU
 (c) Control Unit (d) Register
20. CPU consists of the following parts:
 (a) CU and Main Memory (b) **Control Unit and ALU**
 (c) Main Memory and storage
 (d) Operating system and application
21. The entire computer system is coordinated by:
 (a) ALU (b) Registers
 (c) **Control Unit** (d) a and c
22. Which component of CPU is responsible for comparing the contents of two pieces of data?
 (a) **ALU** (b) Control Unit
 (c) Memory (d) Register
23. Temporary storage locations within CPU is called:
 (a) **Registers** (b) ROMs
 (c) RAM (d) Hard disk
24. A set of communication lines or wires used to transfer data is called:
 (a) **Bus** (b) Monitors
 (c) Clock pulse (d) Port
25. All of the following are computer buses EXCEPT:
 (a) Control Bus (b) Data Bus
 (c) Address Bus (d) **Timer Bus**
26. A bus that moves data between the central processor and memory is known as:
 (a) I/O bus (d) CPU bus
 (c) Processor bus (d) **Data Bus**
27. A bus with 32 lines can carry _____ of data:
 (a) **32-bits** (b) 64-bits
 (c) 16-bits (d) 32-bytes
28. A 8-bit address bus can locate:
 (a) **256 locations** (b) 625 locations
 (c) 8 locations (d) 16 locations
29. RAM is an example of:
 (a) Secondary memory (b) **Main memory**
 (c) Permanent storage (d) Permanent memory
30. Which of the following is secondary memory?
 (a) Floppy disk (b) Hard disk
 (c) Magnetic tape (d) **All**

31. The input/output device that are connected to a computer system are known as:
- (a) **Peripheral** (b) Buses
(c) Slots (d) Socket
32. The interface that connects peripherals with the computer is called:
- (a) **Port** (b) Links
(c) Bus (d) Processor
33. What type of port sends data one bit at a time?
- (a) **Serial** (b) Parallel
(c) USB (d) HDMI
34. Which ports is used for connecting a printer to computer?
- (a) Serial (b) **Parallel**
(c) Both a and b (d) HDMI
35. Parallel port contains:
- (a) **25 pins** (b) 35 pins (c) 45pins (d) 12 pins
36. USB port can connect devices:
- (a) **127** (b) 250 (c) 300 (d) 275
37. The most popular type of port to connect devices to the computer is:
- (a) Serial port (b) Parallel port
(c) HDMI port (d) **USB port**
38. A set of computer instructions designed to solve problems is known as:
- (a) **Program** (b) Instruction code
(c) Procedure (d) Word
39. The circuit board on which the processor and other chips are placed is called.
- (a) Big board (b) **Motherboard**
(c) Master circuit (d) Connector circuit
40. The arithmetic/logic unit performs the following actions.
- (a) Control computer operations
(b) Perform arithmetic functions
(c) Perform logical comparisons
(d) **Both b and c**
41. ALU performs arithmetic and _____ operations.
- (a) **Logical** (b) Local
(c) Loading (d) Linear
42. How many bits are carried by one line of data bus?
- (a) **1** (b) 2 (c) 3 (d) 4
43. A 32-bit bus is _____ than a 16-bit bus.
- (a) Wider (b) Faster
(c) Longer (d) **a and b**
44. A 32 bit address line can access _____ of memory.
- (a) **4GB** (b) 8 GB (c) 16 GB (d) 32 GB

Chapter 3 Input/Output Devices

1. The devices used to enter data or information into a computer include:
- (a) Keyboards (b) Mouse
(c) Microphone (d) **All**
2. Which device converts data and instruction in a form that computer understands?
- (a) **Input** (b) Output
(c) Storage (d) Memory
3. A typical keyboard used in personal computer can have how many keys.
- (a) 110 to 120 keys (b) 130 to 140 keys
(c) 111 to 115 keys (d) **101 to 104 keys**
4. QWERTY and Dvorak is used with reference to:
- (a) Screen layout (b) Mouse button layout
(c) **Keyboard layout** (d) Word processing software
5. Which of the following keys is used to cancel an operation?
- (a) Arrow (b) Caps Lock
(c) Num Lock (d) **Esc**
6. Which key removes the character to the right of the cursor?
- (a) Esc (b) Backspace
(c) **Delete** (d) Alt
7. Which key removes the character to the left of the cursor?
- (a) Esc (b) **Backspace**
(c) Delete (d) Alt
8. Arrow keys are also called:
- (a) Toggle keys (b) Function keys
(c) Modifier keys (d) **Cursor control keys**
9. Caps Lock is a:
- (a) **Toggle key** (b) Window key
(c) Modifier key (d) Cursor control key
10. An example of a pointing device is:

- (a) Mouse (b) Joystick
(c) Trackball (d) All
11. Which of the following is a mouse event?
(a) Left click (b) Right click
(c) Double click (d) All
12. Which of the following mouse event is used to view the properties of an object?
(a) Left click (b) Right click
(c) Double click (d) Center click
13. Another name for pointer is:
(a) Arrow (b) Pixel
(c) Chip (d) Pen
14. When the amount of workspace is limited, an alternative to mouse could be a:
(a) Trackball (b) Scanner
(c) joystick (d) a and c
15. The most commonly used popular pointing device is:
(a) Mouse (b) Trackball
(c) Joystick (d) Touchpad
16. Which device is commonly used for gaming:
(a) Trackball. (b) Joystick
(c) Light pen (d) Scanner
17. The printed image can be input into digital form inside the computer using a:
(a) Mouse (b) Trackball
(c) Scanner (d) Light pen
18. Which type of software converts scanned text into a text file?
(a) HDD (b) FDD (c) OCR (d) CRT
19. Which of the following is used to convert a person speech into digital data?
(a) Sound conversion code
(b) Sound machine converters
(c) Voice recognition (b) Sound recorder
20. What type of device translates data into a form that we can understand?
(a) Input (b) Output
(c) Storage (d) Memory
21. The devices commonly used to receive data and information from computer are:
(a) Monitor (b) Printer
(c) Speaker (d) All
22. Which of the following device is used to get softcopy output?
(a) Printer (b) Plotter
(c) Monitor (d) Processor
23. Which of the following device is used to get hardcopy output?
(a) Printer (b) CD-Writer
(c) Monitor (d) Processor
24. The dots that compose the image of a digital photograph are called:
(a) Dot matrix (b) Resolution points
(c) Pixels (d) Digital points
25. The Number of pixels on the screen is called:
(a) Hard copy (b) Resolution
(c) Soft copy (d) Picture quality
26. The advantage of high-resolution over low-resolution digital photography is:
(a) Better picture quality (b) Greater cost savings
(c) Fewer storage requirements
(d) Faster processing speed
27. Pixel is short for:
(a) Page edit (b) Place edit
(c) Picture enters (d) Picture elements
28. All of the following are impact printers EXCEPT:
(a) Laser printer (b) Ink-jet printer
(c) Dot matrix printer (d) both a and b
29. All of the following are non-impact printers EXCEPT:
(a) Laser printer (b) Ink-jet printer
(c) Thermal printer (d) Dot matrix printer
30. Which of the following is the fastest printer?
(a) Laser printer (b) Inkjet printer
(c) Dot Matrix printer (d) Daisy wheel printer
31. Which type of printer works like a photocopy machine?
(a) Line printer (b) Ink-jet printer
(c) Dot-matrix printer (d) Laser printer
32. What type of printer forms images one character at a time as the print head moves across the paper?
(a) Plotter (b) Ink-jet printer
(c) Dot-matrix printer (d) Laser printer

33. Which type of printer creates output using heated pins on heat sensitive paper?
 (a) Line printer (b) Ink-jet printer
 (c) Dot-matrix printer **(d) Electro-Thermal Printer**
34. The speed of laser printers is measured in:
 (a) Characters per second (cps)
 (b) Words per minute (wpm)
 (c) Lines per minute (lpm)
(d) Pages per minute (ppm)
35. CRT stands for:
 (a) Coated Rays Tube **(b) Cathode Rays Tube**
 (c) Chemical Rays Tube (d) Color Rays tube
36. Which type of drive allows multiple reads and writes to optical storage media?
 (a) DVD-ROM **(b) CD-RW**
 (c) CD-ROM (d) CD-R
37. Which of the following is NOT an input device?
 (a) Keyboard (b) Mouse
 (c) Microphone **(d) Speaker**
38. Which of the following is not an output device?
(a) Scanner (b) Printer
 (c) Monitor (d) Speaker
39. Two type of display devices are _____ displays.
 (a) Inkjet and laser **(b) Flat-panel and CRT**
 (c) Impact and non-impact (d) Stylus and puck
40. The advantage of an LCD monitor is that it is:
 (a) Lighter (b) Faster
 (c) More compact **(d) a and c**
41. Which is an intermediary device between the CPU and the monitor?
(a) Video Controller (b) Monitor Controller
 (c) Output Controller (d) Network Controller
42. The quality of printers is measured in _____.
 (a) Character per second (cps)
(b) Dots per Inch (dpi)
 (c) Lines per second (lps)
 (d) Pages per minute (ppm)
43. Which of the following is not a type of printer?
 (a) Laser (b) Inkjet
 (c) Impact **(d) Flatbed**
44. Laser printer is an example of:

- (a) Non-Impact** (b) Inkjet
 (c) Dot Matrix (d) Impact
45. The output of printer is called:
(a) Hard copy (b) Photocopy
 (c) Duplicate copy (d) Soft copy
46. Which of the following is a type of plotter?
 (a) Daisy wheel (b) Dot matrix
(c) Drum (d) Line
47. A CRT monitor contains a _____ which is a fine mesh made up of metal fitted to the shape and size of the screen.
(a) Shadow mask (b) Liquid crystal
 (c) Drum (d) Pen

Chapter 4 Storage Devices

1. Main memory is also known as:
 (a) Primary memory (b) Primary storage
 (c) Internal memory **(d) All**
2. An identifiable location in memory where data are kept is called:
 (a) Space **(b) Address**
 (c) Location (d) Cell
3. The cells of memory are logically organized into groups of:
(a) 8 bits (b) 5bits (c) 12 bits (d) 24 bits
4. The RAM stands for:
 (a) Readily available memory
 (b) Read and more memory
(c) Random access memory
 (d) Remember all memory
5. A characteristic of RAM is that it is:
 (a) Read/Write (b) Nonvolatile
 (c) Volatile **(d) a and c**
6. The ROM stands for:
 (a) Recursive online memory
 (b) Rapid online memory
 (c) Random only memory
(d) Read only Memory
7. A characteristic of ROM is that it is:
 (a) Read only (b) Volatile
 (c) Nonvolatile **(d) a and c**
8. The difference between ROM and RAM is:

- (a) ROM is larger (b) ROM is nonvol
(c) ROM is read only (d) **Both b and c**
9. Which one is faster:
(a) RAM (b) Cache
(c) **Register** (d) Hard Disk
10. Which of the following is a type of RAM?
(a) Direct RAM (b) Dynamic RAM
(c) Stable RAM (d) **Static RAM**
11. Which type of memory uses the chips that retain the contents indefinitely without constant electronic refreshment:
(a) Dynamic RAM (b) Dynamic ROM
(c) **Static RAM** (d) Static ROM
12. Which of the following is most likely used for static RAM technology?
(a) Primary memory (b) Secondary storage
(c) **Cache memory** (d) CPU registers
13. DRAM is:
(a) Used for cache memory
(b) More expensive than SRAM
(c) **Cheaper than SRAM** (d) Same as SRAM
14. Which of the following is usually used to measure data storage?
(a) MHz (b) Kbps (c) **Byte** (d) None
15. BIT stands for:
(a) **Binary digit** (b) Byte digit
(c) Base digit (d) Basic Digit
16. The smallest unit of data in the computer is:
(a) Character (b) Word
(c) **Bit** (d) Byte
17. A bit can represent how many different values?
(a) 0 (b) 1 (c) **2** (d) 3
18. Which of the following is the largest?
(a) Megabyte (b) **Terabyte**
(c) Gigabyte (d) Kilobyte
19. How many bits are in one byte?
(a) 1 (b) 2 (c) 4 (d) **8**
20. How many bits are in one nibble?
(a) 1 (b) 2 (c) **4** (d) 8
21. A kilobyte is equal to:
(a) 512 bytes (b) 100 bytes
(c) 256 bytes (d) **1,024 bytes**
22. 1MB is equal to:
(a) 1kb (b) 100KB
(c) 1,024bytes (d) **1024KB**
23. 1 Terabyte is equal to:
(a) 1,000KB (b) 1024MB
(c) **1,024GB** (d) b and c
24. 1 GB is equal to:
(a) 1,000KB (b) **1,024 MB**
(c) 100 TB (d) b and c
25. Which of the following is ranked from smallest to largest?
(a) KB, MB, TB, GB (b) MB, TB, GB, KB
(c) GB, KB, MB, TB (d) **KB, MB, GB, TB**
26. TB stand for:
(a) **Tera byte** (b) Tera bit
(c) Tera base (d) Test byte
27. MB stand for:
(a) **Mega byte** (b) Mega bit
(c) Mechanical base (d) Magnetic base
28. The hardware component that permanently holds data and programs is called:
(a) Primary storage (b) CPU
(c) **Secondary storage** (d) Register
29. The two fundamental methods of storing and accessing data are:
(a) **Sequential and Direct.** (b) Parallel and serial.
(c) Zipped and compressed.
(d) IN sectors and in groups.
30. Stored data and information are placed on a storage medium such as a(n):
(a) Magnetic disk (b) Magnetic tape
(c) Compact disk (d) **All**
31. Compare to memory, storage is:
(a) Cheaper (b) Large capacity
(c) Slow Access (d) **All**
32. Which of the following storage is read-only?
(a) Hard disk (b) Random access memory
(c) **CD-ROM** (d) Magnetic tape
33. A magnetic tape is:
(a) Read-write device (b) Slow speed

- (c) A sequential storage device (d) All of these
34. The device that holds a disk is called a:
 (a) Disk drive (b) Disk holder
 (c) Disk Cache (d) **Diskette**
35. What is the size of a standard floppy disc?
 (a) 4 1/2" (b) 2 1/2"
 (c) **3 1/2"** (d) 5 1/2"
36. The term that refers to a circular portion of the disk is:
 (a) Cycle (b) Sector
 (c) Cylinder (d) **Track**
37. A collection of similarly positioned tracks on multiple platters of a disk pack is called a:
 (a) Sector (b) Cylinder
 (c) **Track** (d) Spiral
38. Which action involves waiting for a sector to position itself under read/write head?
 (a) Seek (b) **Rotational delay**
 (c) Data transfer (d) All
39. Which action involves positioning a read/write head over a track?
 (a) **Seek** (b) Rotational delay
 (c) Data transfer (d) All
40. A subdivision of a track on a magnetic disk is called:
 (a) Subdivision (b) **Sector**
 (c) Field (d) Cylinder
41. How many bytes can be stored in one sector?
 (a) 16 (b) 1024 (c) **512** (d) 215
42. CD-ROM capacity is around:
 (a) 100 (b) **700MB** (c) 1 GB (d) 4 GB
- (c) Alphanumeric data (d) Both a and b
5. The numbers stored and transmitted inside a computer in:
 (a) **Binary form** (b) Decimal form
 (c) Alphanumeric form (d) Octal form
6. A collection of 8 bits is known as:
 (a) **Byte** (b) Bit
 (c) Binary (d) Octal
7. The base of decimal number system is:
 (a) **10** (b) 2 (c) 8 (d) 16
8. The base of binary number system is:
 (a) 16 (b) **2** (c) 8 (d) 10
9. The base of octal number system is:
 (a) 10 (b) 2 (c) **8** (d) 16
10. The base of hexadecimal number system is:
 (a) **16** (b) 2 (c) 8 (d) 10
11. The number of digits in octal system is:
 (a) **8** (b) 7 (c) 10 (d) 16
12. The number of digits in decimal system is:
 (a) 8 (b) 7 (c) **10** (d) 16
13. The number of digits in Hexadecimal system is:
 (a) 15 (b) 17 (c) **16** (d) 8
14. The number of bits in a nibble is:
 (a) 16 (b) 5 (c) **4** (d) 8
15. The F in Hexadecimal system is equivalent to _____ is decimal system.
 (a) 16 (b) **15** (c) 17 (d) 8
16. In hexadecimal number system, A is equal to decimal number:
 (a) 10 (b) 11 (c) 17 (d) 18
17. In hexadecimal number system, B is equal to decimal number:
 (a) 10 (b) **11** (c) 17 (d) 18
18. In hexadecimal number system, C is equal to decimal number:
 (a) 10 (d) 11 (c) **12** (d) 18
19. What is the decimal value of 23?
 (a) 2 (b) 4 (d) 6 (c) **8**
20. What is the decimal value of 2-1 is equal to?
 (a) **0.5** (b) 0.25 (d) 0.05 (d) 0.1
21. The E in hexadecimal is equal to binary number:

Chapter 5 Number Systems

1. A collection of raw facts and figure is called:
 (a) **Data** (b) Information (c) Processing (d) Output
2. The data after the processing is called:
 (a) Data (b) **Information** (c) Procedure (d) Storage
3. Which of the following is a data type?
 (a) Numeric (b) Alphabetic
 (c) Alphanumeric (d) **All**
4. Which of the following data type is used to represent names of students:
 (a) Numeric data (b) **Alphabetic data**

- (a)1110 (b)1101 (c)1001 (d)1111
22. The D in hexadecimal is equal to binary number:
(a)1110 (b)1101 (c)1001 (d)1111
23. Which of the following binary numbers is equivalent to decimal 10?
(a) 1000 (b)1100 (c)1010 (d)1001
24. The FF in hexadecimal system is equivalent to decimal system number:
(a)256 (b)255 (c)240 (d)239
25. The binary number 1101 is equal to octal number:
(a)15 (b)16 (c)17 (d)14
26. $3 \times 10^1 + 7 \times 10^0$ is equal to:
(a) 3.6 (b)10 (c)370 (d)37
27. is equal to:
(a) 1 (b)0 (c) 2 (d) 20
28. The decimal number 18 is equal to the binary number:
(a)11110 (b)10001
(c) 10010 (d) 1111000
29. The difference of $111_2 - 001_2$ equals:
(a) 100 (b)111 (c)001 (d)110
30. Binary multiplication $1^*0=$:
(a) 1 (b)0 (c)10 (d)11
31. The 1's complement of 10011101 is:
(a) 01100010 (b) 10011110
(c) 01100001 (d) 01100011
32. MSB stand for:
(a) Middle sum byte (b) Maximum single bit
(c) Minimum single bit (d) Most Significant bit
33. The sign bit is defined as:
(a) MSB (b) 0 for positive
(c) 1 for negative (d) All
34. If the most significant bit of the signed number is 1, that number is:
(a) Positive (b) Negative
(c) Incorrect (d) Octal
35. How many characters in ASCII 7-bit code can represent?
(a) 128 characters (b) 256 characters
(c) 500 characters (d) 364 characters
36. How many characters in ASCII 8-bit code can represent?

- (a) 128 characters (b) 256 characters
(c) 500 characters (d) 364 characters
37. The most widely used coding scheme for representing characters in computers is:
(a) Unicode (b) ASCII
(c) EBCDIC (d) BCD
38. BCD stands for:
(a) Binary coded decimal (b) Base coded decimal
(c) Byte coded decimal
(d) Bidirectional coded decimal
39. The BCD number for decimal 16 is:
(a) 00010110 (b) 00010000
(c) 00010010 (d) 11100000
40. Unicode is a:
(a) 16-bit cod (b) 32-bit code
(c) 64-bit code (d) 132-bit code
41. How many characters can Unicode represent?
(a) 65536 (b) 10000 characters
(c) 15000 characters (d) 256 characters

Chapter 6 Boolean Algebra

1. Boolean Algebra was developed in the year:
(a) 1847 (b)1947 (c)1915 (d)1940
2. Who developed Boolean algebra?
(a) Von-Neumann (b) George Boole
(c) Charles Babbage (d) Dennis Ritchie
3. Boolean algebra has exactly the same structure as:
(a) Propositional calculus (b) Mathematical calculus
(c) Relational calculus (d) Differential calculus
4. Boolean algebra is also known as:
(a) Logical algebra (b) Code algebra
(c) Switching algebra (d) Digital algebra
5. Logic states can only be ___ or 0.
(a) 3 (b)2 (c)1 (d)0
6. In Boolean algebra, there are ___ possible variable value.
(a) 1 (b) 2 (c) 4 (d) 8
7. The AND operator of Boolean algebra is denoted by
(a) * (b) + (c) - (d) .
8. The OR operator of Boolean algebra is denoted by:
(a) * (b) + (c) - (d) .

9. In the Boolean equation $x=AB$, the term AB is generally read as
 (a) Multiplied A by B (b) **A and B**
 (c) A or B (d) Logic o or 1
10. In the Boolean equation $x=A+B$, the term $A+B$ generally read as
 (a) A and B (b) **A or B**
 (c) A plus B (d) A added to B
11. Anything ANDed with 0 is equal to:
 (a) **0** (b) 1
 (c) itself (d) Complement
12. Anything ORed with 1 is equal to:
 (a) 0 (b) **1**
 (c) Itself (d) Complement
13. $x + y = y + x$ is a representation of the:
 (a) Associative law (b) Conductive law
 (c) **Commutative law** (d) Distributive law
14. $x(yz) = (xy)z$ is a representation of the:
 (a) **Associative law** (b) Conductive law
 (c) Commutative law (d) Distributive law
15. Which Boolean equation expressed the commutative law?
 (a) $ab = ba$ (b) $a + b = b + a$
 (c) **Both a and b** (d) $a \times b = b \times a$
16. In Boolean algebra, $A.1 =$
 (a) 1 (b) 0 (c) **A** (d) \bar{A}
17. In Boolean algebra, $A+1 =$
 (a) **1** (b) 0 (c) A (d) \bar{A}
18. In Boolean algebra, $A+0 =$
 (a) 1 (b) 0 (c) **A** (d) \bar{A}
19. In boolean algebra, $A.A =$
 (a) 1 (b) 0 (c) **A** (d) \bar{A}
20. In Boolean algebra, $A + \bar{A} =$
 (a) 1 (b) 0 (c) **A** (d) \bar{A}
21. In Boolean algebra, $A + \bar{A} =$
 (a) **1** (b) 0 (c) A (d) \bar{A}
22. In Boolean algebra, $A.\bar{A} =$
 (a) 1 (b) **0** (c) A (d) \bar{A}
23. In Boolean algebra, $\bar{\bar{x}} =$
 (a) 1 (b) 0 (c) **x** (d) \bar{x}
24. Applying DeMorgan's theorem to the expression

\overline{ABC} we get _____.

- (a) $\bar{A} + \bar{B} + \bar{C}$ (b) $\overline{A+B+C}$
 (c) $A + \bar{B} + C\bar{C}$ (d) $A(B+C)$

25. Applying DeMorgan's theorem to the expression

$\overline{A+B+C+D}$, we get _____

- (a) $\bar{A}\bar{B}\bar{C}\bar{D}$ (b) $\bar{A} + \bar{B} + \bar{C} + \bar{D}$
 (c) $A + \bar{B} + \bar{C} + D$ (d) $\bar{A} + B + C + \bar{D}$

26. In which function is each term known as min term:

- (a) **Standard product** (b) Standard Sum
 (c) Hybrid (d) Both a and b

27. In which function is each term known as max term:

- (a) Standard product (b) **Standard Sum**
 (c) Hybrid (d) Both a and b

28. A Karnaugh map with 3 variables has:

- (a) 2 cells (b) 4 cells
 (c) **8 cells** (d) 16 cells

Chapter 7 Computer Software

1. The two major types of software are:
 (a) **Application and system** (b) System and design
 (c) Application and design (d) System and design
2. Which one of the following is application software?
 (a) Windows (b) Linux
 (c) **Microsoft Excel** (d) DOS
3. An operating system is considered to be:
 (a) Computer hardware (b) Application software
 (c) **System software** (d) Memory
4. All of the following are types system software EXCEPT:
 (a) Operating system (b) **Spreadsheet software**
 (c) Language translator (d) Utility programs
5. Which of the following services are provided by the operating system?
 (a) Hardware Management (b) User interface
 (c) Load and execute program (d) **All**
6. How many types of language translator have?
 (a) 1 (b) 2 (c) **3** (d) 4
7. Which program translates assembly language code to machine code?
 (a) Compiler (b) Interpreter

- (c) **Assembler** (b) Linker
8. Which one of the following translates source code to object code as a whole?
(a) Interpreter (b) Compiler
(c) **Assembler** (d) Linker
9. Choose the program that translates and executes one line of source code at a time.
(a) Compiler (b) Assembler
(c) **Interpreter** (d) Linker
10. Which of the following is a type of user interface?
(a) Interactive User Interface
(b) Graceful User Interface
(c) Textual User Interface
(d) **Graphical User Interface**
11. Which interface uses icons and windows?
(a) Command driven (b) Windows oriented
(c) **Graphical user** (d) DOS-based
12. The following is an example of which type of user interface? copy A:\memo.doc c:\letter.doc
(a) **Command line** (b) Instruction-driven
(c) Directive-based (d) GUI
13. Interface used by DOS is called:
(a) Menu-driven interface
(b) **Command-driven interface**
(c) Design interface (System interface)
14. In DOS, a user communicates with the operating system by issuing:
(a) **Commands** (b) Instructions
(c) Routines (d) Procedures
15. Which of the following file contains DOS internal commands:
(a) Batch file (b) Executable-file
(c) **Command file** (d) Source file
16. The extension of a batch file is:
(a) .EXE (b) **.BAT**
(c) .COM (d) a and c
17. How many types of DOS commands are there?
(a) 6 (b) 4 (c) **2** (d) 1
18. All of the following are internal commands of DOS EXCEPT:
(a) DATE (b) VER (c) MD (d) **XCOPY**
19. All of the following are external commands of DOS EXCEPT:
(a) **DISKCOPY** (b) TREE
(c) FORMAT (d) CD
20. In DOS command, a backslash is used as part of a:
(a) Syntax (b) Switch
(c) **Path** (d) Result
21. In DOS command, a forward slash is used to indicate:
(a) Syntax (b) **Switch**
(c) Path (d) Result
22. Which of the following DOS command is used to make a new directory?
(a) MD (b) MKDIR
(c) MDDIR (d) **a and b**
23. Which wildcard character represents any single character?
(a) ? (b) * (c) & (d) #
24. Which wildcard character represents multiple character?
(a) ? (b) * (c) & (d) #
25. Which parameter in DOS is used to view a directory list one screen a time?
(a) More (b) **Pause** (c) Screen (d) Hold
26. The command DEL *.* will delete:
(a) **All files** (b) Two files
(c) Three Files (d) Four files
27. Which command will move the control one level above to the parent directory?
(a) **CD** (b) DC/ (c) CD. (d) CD\
28. Which command will move the control to the root of the partition of the hard disk:
(a) CD (b) DC/ (c) CD. (d) **CD**
29. Which file will be searched using the wildcard Letters.?xt?
(a) Letters.4xt (b) Letters.xxt
(c) Letters.txt (d) **All**
30. How many wildcards are used in DOS?
(a) 1 (b) **2** (c) 3 (d) 4
31. Which command removes directory along with all files and subdirectories in it?
(a) DEL (b) RD (c) **DELTREE** (d) b and c

32. Which files will be searched using the wildcard Letters.*?
- (a) Letters.doc (b) Letters.txt
 (c) Letters.ppt (d) All
33. A computer cannot boot if it does not have:
- (a) Compiler (b) Loader
 (c) Operating System (d) Assembler
34. Which of the following acts as an interface between the user and the hardware?
- (a) MS Word (b) Operating system
 (c) Language processor (d) Application software
35. Which of the following provides a platform for other software to execute?
- (a) MS Word (b) Operating system
 (c) Language processor (d) Application software
36. The operating system manages:
- (a) CPU (b) Memory
 (c) I/O devices (d) All
37. Which of the following are considered as resource?
- (a) Processor (b) Memory
 (c) User (d) a and b
38. Which of the following resource can be allocated by operating system?
- (a) CPU (b) Instruction register
 (c) File system (d) Bus
39. DOS is a:
- (a) Single user Multitasking
 (b) Single user single tasking
 (c) Multi user OS
 (d) Multiuser Multitasking
4. Normally, floppy drive is designated:
- (a) C:\ (b) E:\ (c) F:\ (d) A:\
5. In "PhoneNumbers.txt", "txt" indicates:
- (a) File name (b) Directory
 (c) Extension (d) File location
6. The file name and the extension are separated by:
- (a) Comma (,) (b) Colon (:)
 (c) Semi-colon (;) (d) Period (.)
7. What is the extension for Word files:
- (a) doc (b) xls (c) ppt (d) mdb
8. What is the extension for an Excel file?
- (a) doc (b) xls (c) ppt (d) mdb
9. A folder is a:
- (a) Collection of files (b) Collection of disks
 (c) Another term for icon (d) None
10. GUI stands for:
- (a) Graphical User Interface
 (b) General User Interrupt
 (c) Graphs, Utilities, Icons
 (d) Grayed User Interface
11. A small image that represents a program, instruction or file etc. is called:
- (a) Menu (b) GUI (c) Control buttons (d) Icon
12. The process of touching an object with mouse pointer is called:
- (a) Pausing (b) Dropping
 (c) Pointing (d) Moving
13. The work area on which windows, icons, menus and dialog box appear is called:
- (a) Screen (b) Desktop
 (c) Taskbar (d) Windows
14. Which of the following is used to switch between running programs?
- (a) Recycle bin (b) My documents
 (c) Taskbar (d) Start button
15. All files deleted from computer are stored in:
- (a) Taskbar (b) Windows explore
 (c) Recycle Bin (d) My documents
16. Software can be removed/installed through:
- (a) Control Panel (b) Window explore
 (c) Taskbar (d) Desktop

Chapter 8 Introduction to Windows

1. Windows is the most popular product of:
- (a) Sun system (b) Microsoft
 (c) Apple (d) IBM
2. Data is included in files, and files are placed in:
- (a) Directories (b) Extensions
 (c) Binders (d) None
3. Digital data is stored in:
- (a) Folders (b) Directories
 (c) Files (d) Paths

17. Which of the following is used to manage Files & Folders?
 (a) Control Panel (b) Window Accessories
(c) Windows Explorer (d) Internet Explorer
18. Which of the following is used to access the Internet?
 (a) Window explorer (b) Internet explorer
 (c) Start button (d) Recycle bin
19. Which of the following is used to access programs installed on computer?
(a) Start button (b) Windows explorer
 (c) Internet explorer (d) My document
20. Which of the following is a mouse event?
 (a) Left click (b) Right click
 (c) Double click (d) All
21. A shortcut may be created for:
 (a) Application (b) Folder
 (c) Drive (d) All
22. Shut down option exists on:
 (a) Task bar (b) Start menu
 (c) Desktop (d) Title bar
23. When the user clicks and drags a file to another folder on same drive, the file is:
 (a) Copied (b) Moved
 (c) Deleted (d) Renamed
24. A program that interferes with the normal routine of the computers is called:
(a) Virus (b) Antivirus
 (c) Macintosh (d) Windows explore
25. A special program that can detect and remove viruses from computer is called:
 (a) Operating system (b) Anti-Virus
 (c) Virus (d) Browser
26. Which of the following is example of antivirus program?
 (a) Symantec (b) McAfee
 (c) Panda (d) All

Chapter 1 Problem Solving

1. Which of the following is a problem solving activity:
(a) Programming (b) Procedure
 (c) Bug (d) Code
2. The technique of dividing a complex and large problem in smaller parts is called.
 (a) Top-down design (b) Algorithm development
 (c) Divide and Conquer Rule (d) Both a and c
3. A finite set of steps to solve a problem is called:
(a) Algorithm (b) Solution
 (c) Syntax (d) Result
4. A graphical representation of the steps of an algorithm is called a(n):
(a) Flowchart (b) Algorithm diagram
 (c) Data flow diagram (d) Design chart
5. The set of instructions given to the computer to solve a problem is known as:
(a) Program (b) Algorithm
 (c) Hardware (d) Flowchart
6. The process of carefully observing the working of an algorithm is called:
(a) Desk Checking (b) Compiling
 (c) Debugging (d) Coding
7. The process of writing a program in programming language is called:
 (a) Flowchart designing (b) Coding
 (c) Desk Checking (d) Documenting
8. The set of rules for writing a program in any programming language is called:
(a) Syntax (b) Bug
 (c) Debug (d) Index
9. Which term is commonly used to refer to program errors:
(a) Bugs (b) Debug
 (c) Compiling (d) Syntax
10. The process of finding and removing errors in the program is called:
(a) Debugging (b) Compiling
 (c) Executing (d) Coding
11. Which of the following is NOT an example of a program bug:
 (a) Run-time error (b) Syntax error
 (c) Logical error (d) Operator error

12. A program syntax errors is detected by:
 (a) Compiler (b) Debugger
 (c) Interpreter (d) **Both a and c**
13. Which of the following errors cannot be detected by compiler?
 (a) **Logical error** (b) Syntax error
 (c) Both a and b (d) Output error
14. A spelling mistake of any command in GW-BASIC is an example of:
 (a) Run-time error (b) **Syntax error**
 (c) Logical error (d) Typing error
15. If a program gives output that is different from thinking of programmer, it is called:
 (a) Run-time error (b) Syntax error
 (c) **Logical error** (d) Output error
16. All of the following are part of the documentation process EXCEPT:
 (a) Test procedures (b) Program algorithm
 (c) **Machine language code** (d) User manual
17. The diamond symbol in a flowchart indicates:
 (a) Progress (b) **Condition**
 (c) Input (d) Output
18. The rectangle symbol in flowchart indicates:
 (a) **Process** (b) Condition
 (c) Input (d) Output
19. How many types of errors can occur in GW-BASIC?
 (a) 1 (b) 2 (c) **3** (d) 4
20. Which type of error occurs when program directs the computer to execute an illegal or undefined operation?
 (a) **Run-time error** (b) Syntax error
 (c) Logical error (d) Output error
21. The Annotation symbol in flow chart indicates:
 (a) Process (b) Condition
 (c) Input (d) **Remarks**
22. Which of the following tasks can be performed to remove logical errors?
 (a) Testing program instructions
 (b) Checking all variables closely
 (c) Testing all logical flows in program
 (d) **All of the above**
23. The Parallelogram symbol in flow chart indicates:
 (a) Input (b) Output
 (c) **Both a and b** (d) Process
24. The most difficult part of problem solving is:

- (a) **Design Algorithm** (b) Testing program
 (c) Documentation (d) Program execution

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| Chapter 2 | Data Types, Assignment and Input/Output Statements |
|-----------|--|

1. BASIC language was developed in the year:
 (a) 1970 (b) 1972 (c) 1976 (d) **1963**
2. Who developed BASIC language?
 (a) Von-Neumann (b) John Kemeny
 (c) Thomas Kurtz (d) **Both b and c**
3. IDE stands for:
 (a) Input data error (b) Internal disk error
 (c) **Integrated development Environment**
 (d) Input Desktop Environment
4. Which of the following key is used to save a file in GW-BASIC?
 (a) F3 (b) **F4** (c) F2 (d) F1
5. Which of the following key is used to load a file in GW-BASIC?
 (a) **F3** (b) F4 (c) 2 (d) F1
6. Which of the following key is used to execute a program in GW-BASIC?
 (a) F3 (b) F4 (c) **F2** (d) F1
7. In GW-BASIC, the maximum number of characters in a line can be:
 (a) **255** (b) 270 (c) 355 (d) 380
8. Which symbol is used to write two or more statement in one line?
 (a) **Colon** (b) Semicolon
 (c) Comma (d) Dot
9. In GW-BASIC, the maximum number of characters in variable name can be:
 (a) **40** (b) 50 (c) 60 (d) 80
10. The character set of GW-BASIC comprises of:
 (a) Alphabets (b) Numeric
 (c) Special characters (d) **All**
11. What is the name for a word that has a predefined meaning in GW-BASIC?
 (a) **Keywords** (b) Alphabets
 (c) Special character (d) Variable
12. Another name for keyword is:
 (a) **Reserved word** (b) Special word
 (c) Comments (d) Remarks
13. All of the following is keyword in GW-BASIC EXCEPT?

- (a) IF (b) ELSE (c) THEN (d) Marks
14. Variables are created in:
(a) RAM (b) ROM (c) Hard Disk (d) CPU
15. A memory location with some data that cannot be changed during program execution is called?
(a) Constant (b) Variable
(c) Keyword (d) String
16. All of the following contain variable name EXCEPT:
(a) Alphabets (b) Numbers
(c) Decimal point (d) Blank spaces
17. Which of the following is a type declaration character for string variable?
(a) \$ (b) % (c) ! (d) #
18. The number of bytes used by integer variable in GW-BASIC is?
(a) 2 (b) 4 (c) 8 (d) 12
19. Which of the following data type is most suitable for storing a name?
(a) String (b) Integer
(c) Single-precision (d) Double-precision
20. A string constant must be enclosed in:
(a) Double quotation marks (") (b) Single quotes (')
(c) Exclamation points (!) (d) Pound signs (#)
21. Which of the following BASIC command is used to automatically generate line number when Enter key is pressed?
(a) AUTO (b) CONT (c) LOAD (d) RUN
22. Which of the following BASIC command is used to remove file from the disk?
(a) KILL (b) DELETE
(c) CLS (d) END
23. Non-executable statement is indicated by:
(a) REM (b) NAME (c) RENUM (d) END
24. An expression consists of:
(a) Constant (b) Variable
(c) Arithmetic operators (d) All
25. All of the following are valid expressions EXCEPT:
(a) Sales-Revenues (b) Mpg, Gallons
(c) $\pi * \text{Radius}$ (d) M/n
26. An assignment statement can:
(a) Perform a calculation
(b) Store the results of a calculation
(c) Both a and b (d) Display output
27. Which of the following is used as assignment statement in GW-BASIC?
(a) INPUT (b) PRINT
(c) LET (d) READ
28. Which of the following is used as output statement in GW-BASIC?
(a) INPUT (b) PRINT
(c) WRITE (d) READ
29. All of the following is arithmetic operators EXCEPT?
(a) + (b) - (c) MOD (d) >
30. The modulus operator is used for:
(a) Exponentiation (b) Multiplication
(c) Division (d) Integer remainder
31. Another name for modulus operator is:
(a) Concatenation operator (b) Remainder operator
(c) Logical operator (d) Integral division operator
32. The result of "10 MOD 3" is:
(a) 1 (b) 3 (c) 8 (d) 0
33. The result of "3 MOD 5" is:
(a) 3 (b) 5 (c) 0 (d) 15
34. The result of "0 MOD 4" is:
(a) 0 (b) 4 (c) 40 (d) 1
35. Which of the following operators is used to assign a value to a variable?
(a) > (b) + (c) = (d) *
36. A relation expression produces results as:
(a) true(1) (b) false(0)
(c) Either a or b (d) Any value
37. How many relational operators used in GW-BASIC
(a) 2 (b) 4 (c) 6 (d) 3
38. All of the following are relational operators EXCEPT:
(a) ^ (b) < (c) = (d) >=
39. How many logical operators available in GW-BASIC?
(a) 2 (b) 4 (c) 6 (d) 3
40. Which of the following returns True if A = 25 and B = 35:
(a) A+B (b) A>=B (c) A<>B (d) A=B
41. In GW-BASIC, two relational expression can be joined by using:
(a) Arithmetic operators (b) Relational operators
(c) Logical operators (d) Assignment operator
42. The extension of BASIC program is:
(a) bs (b) doc (c) txt (d) bas

- How many types of control statements are in GW-BASIC?
(a)1 (b)3 (c)5 (d)7
- Which of the following is a control structure in GW-BASIC?
(a)Sequence (b)Selection
(c)Loop (d)All
- Which of the following control structure in GW-BASIC is used to execute statements in order?
(a)Sequence (b)Selection
(c)Loop (d)Iteration
- Which of the following is unconditional control transfer statement in GW-BASIC?
(a)GOTO (b)IF
(c)FOR (d)NEXT
- Which of the following statement is used to find errors during program execution?
(a)ON ERROR GOTO (b) ON...GOTO
(c)GOTO (d) IF...THEN
- Errors handlers in GWBASIC are turned on with:
(a) ON ERROR GOTO (b) ON...GOTO
(c) IF...THEN (d) IF...ERROR
- Which of the following variables are related on ON ERROR GOTO statement?
(a)ERR (b)EOF (c)ERL (d)a and c
- ON ERROR GOTO statement is used to detect:
(a) Logical errors (b)Syntax errors
(c) Runtime errors (d)Output errors
- Which of the following control structure in GW-BASIC is used for decision making:
(a)Sequence (b)Selection
(c) Loop (d) Iteration
- An expression that uses a relational operator is known as a:
(a)Condition (b)Decision
(c) Series (d) Relation
- Which of the following statement can be used to exit from error handling routine?
(a)RESUME (b)RESUME NEXT
(c)END (d) All
- Which of the following is a selection control structure?
(a)FOR (b)if.... THEN.....ELSE
(c) IF.....THEN (d) Both b and c
- Which keyword is used to specify two different choices with IF statement?
(a)THEN (b)Else (c)if (d)WHILE
- Which option must follow the condition in an If...Then statement?
(a)End If (b)End
(c) Then (d) Else
- Which decision statement specifies one option if the test is True and another if the text is False?
(a) If...Then...Else (b) If...Then
(c) GOTO (d) Try...Catch
- The operator used in "IF HoursWorked >= 24 Then..." is called:
(a)Relational operator (b)Logical Operator
(c)Arithmetic operator (d)Math operator
- In "if statement" false is represented by a:
(a)0 (b)1 (c)2 (d)a and b
- In "if statement" true is represented by a:
(a)1 (b)0 (c)2 (d)a and b
- Logical operators are:
(a)AND (b)OR (c)NOT (d) ALL
- This is a control structure that causes a statement or group of statements to repeat:
(a)Sequential (b)Loop
(c)Selection (d) IF
- How many types of loop statements in GW-BASIC?
(a)2 (b)4 (c)5 (d)6
- Which is a loop statement?
(a) FOR...NEXT (b) WHILE...WEND
(c) IF.....THEN.....ELSE (d) Both a and b
- One execution of a loop is called:
(a)cycle (b)Test (c)Iteration (d)Duration
- Which of the following words indicates the end of WHILE loop?
(a)END (b)STOP (c)WEND (d)NEXT
- If the programmer knows in advance how many times the loop will be executed, the suitable control structure is:
(a)FOR....NEXT (b)WHILE.....WEND
(c) Both a and b (d) GOTO
- Which keyword is used to increment or decrement a counter by a value that you specify?
(a) Interval (b)Skip
(c)Step (d)NextLoop
- If STEP keyword is not used in For...Next loop, counter variable is incremented by:

- (a)1 (b)0 (c)10 (d)5
28. The increment in a For....Next loop can be:
 (a) Positive only (b) Negative only
 (c) Both a or b (d) 0
29. If the programmer not know in advance how many times the loop will be executed, the suitable control structure is:
 (a) FOR....NEXT (b) WHILE...WEND
 (c) FOR...WHILE (d) GOTO
30. A loop within loop is called:
 (a) Nested loop (b) Complex loop
 (c) Infinite loop (d) Inner loop

Chapter 4 Arrays

1. A variable that holds a large group of similar type of data is called:
 (a) Array (b) Multiple variable
 (c) Scalar value (d) Structure
2. Each element of array has its own:
 (a) Index (b) Extension (c) Limit (d) All
3. The index of first element of array is:
 (a) 0 (b) 1 (c) 2 (d) 4
4. The index of each element in the array is:
 (a) Similar (b) Unique
 (c) Odd (d) Even
5. To access an array element, use the array name and element's:
 (a) Name (b) Value
 (c) Data type (d) Subscript
6. What is the representation of the third element in array called N:
 (a) N(2) (b) N(3) (c) N(1) (d) N(4)
7. In the statement list[4], the value 4 indicates:
 (a) Size of array (b) Array element
 (c) Index (d) Variable
8. The statement DIM list(15) will reserve _____ memory locations.
 (a) 16 (b) 15 (c) 14 (d) 30
9. One dimensional array is also known as:
 (a) Linear array (b) Vector array
 (c) 1-D array (d) All
10. Which of the following statement is used to declare larger arrays having more than 11 elements:
 (a) DIM (b) INPUT (c) PRINT (d) LET

11. Two dimension array is also know as:
 (a) Table (b) Matrix (c) Both a and b (d) Dim Array
12. A two dimensional array can viewed as:
 (a) rows, columns (b) One row
 (c) One column (d) Variable
13. How many elements does the following array have N(1000):
 (a) 999 (b) 0 (c) 1000 (d) 2000
14. Which of the following declares an array that consists of to 4 rows and 3 column:
 (a) A(3,2) (b) A(2,3) (c) A(4,3) (d) A(8,6)
15. What is the last element of an array having 4 rows and 3 columns?
 (a) A(3,2) (b) A(2,3) (c) A(4,3) (d) A(8,6)
16. What is the first element of an array having 4 rows and 3 columns:
 (a) A(0,0) (b) A(1,1) (c) A(4,3) (d) A(2,3)

Chapter 5 Subprograms & File Handling

1. A large program can be divided into smaller parts called:
 (a) Arrays (b) File
 (c) Sub programs (d) Units
2. How many types of subprograms are in BASIC?
 (a) 2 (b) 4 (c) 3 (d) 1
3. _____ is written once and can be called many times in the program.
 (a) Sub-Programs (b) Loop
 (c) Array (d) IF
4. Which of the following is type of function is BASIC language?
 (a) User-defined (b) Built-in
 (c) Both a and b (d) Simple
5. Another name of built-in function is:
 (a) Pre-defined function (b) Library function
 (c) Both a and b (d) User-defined function
6. A type of function available as part of a language is called:
 (a) User-defined function (b) Built-in function
 (c) Both a and b (d) Read-made function
7. The INT is a:
 (a) Built-in function (b) User-defined function
 (c) Local function (d) Read-made function
8. Which of the following is incorrect about function?
 (a) A function can call another function.

- (b) A function can be called many times in a program
 (c) A function can return a value
(d) A function must have at least one parameter
9. All of the following are built-in functions in BASIC except?
 (a)INT (b)ABS (c)RND **(d)SQRT**
10. The output of a function FIX(-6.83) is:
(a)-6 (b) .83 (c)6.83 (d)-83
11. The output of ABS(-4.58) is:
 (a)4 (b)-4 (c)5 **(d)4.58**
12. The output of SQR(81) is:
(a)9 (b)3 (c)27 (d)81
13. The output of LEN ("Hello World"):
 (a)9 (b)10 **(c)11** (d)12
14. The output of LEFT\$("Hello World",5) is:
(a>Hello (b)Hell (c)Hellow (d)World
15. The output of MID\$("Hello World",1,5) is:
(a>Hello (b)HWorld (c)Hell (d)World
16. A value given to a function is known as:
 (a)Parameter (b)Argument
(c) Both a and b (d) Value
17. Which of the following BASIC statement is used to define a function?
 (a)DEF **(b)DEF FN** (c)DEF FUN (d)FU DEF
18. DEF FN can be used in which mode?
 (a)Direct mode **(b)Indirect mode**
 (c) Both a and b (d) None
19. Which of the following statement allows the use of subroutine?
 (a)GOSUB (b)RETURN
(c)Both a and b (d) AUTO
20. RETURN statement passes control back to:
 (a)GOSUB statement
(b) Next to GOSUB statement
 (c)Beginning of the program
 (d) The statement before GOSUB
21. The last statement of a subroutine is normally:
(a)RETURN (b)GOTO
 (c)GOSUB (d)END
22. A file is stored in?
 (a)RAM **(b)Hard disk** (c)ROM (d)All
23. A collection of related fields is called:
 (a)File **(b)Record** (b)Character (d)String
24. A collection of related characters is called:
(a)Field (b)Record (b)File (d)Line
25. A file that contains software instructions is called:
(a)Program file (b)Data file
 (c) Running file (d) New file
26. The process in which the contents are accessed in sequence is called:
 (a)Random Access **(b)Sequential Access**
 (c)Read-only Access (d) Ordered Access
27. Which is not an access mode that may be specified in OPEN statement?
(a)Read (b)Input (c)Output (d)Append
28. Which keyword is used in Open statement to open a file for reading?
 (a)Read **(b)Input** (c)Output (d)Append
29. The user-defined function in BASIC is called:
(a)Procedure (b)File
 (c)Action (d)Code
30. Which of the following statement is used to read data from a file?
(a)INPUT# (b)INPUT (c)READ (d)DATA

Chapter 6 Microsoft Word

1. MS Word is the product of:
(a)Microsoft (b)Novel (c)Corel (d)Lotus
2. The most widely used word processing software is:
 (a)Word perfect **(b)MS-Word**
 (c)Word Star (d)Notepad
3. The software that provide the facility of documentation is called:
 (a)Windows **(b)Word Processor**
 (c)Spreadsheet (d)Multimedia
4. Word processing includes the process of:
 (a)Entering text (b)Editing text
 (c)Formatting Text **(d)All**
5. Word processing programs are used to create:
 (a)Reports (b)Letters
 (c)Labels **(d)All**
6. Menu contains:
 (a)Button **(b)Commands**
 (c)Titles (d)Symbols
7. Standard tool bar normally exists below:
 (a)Status bar (b)Scroll bar
(c)Menu bar (d)Taskbar
8. The name of the document is displayed on:

- (a) Status Bar **(b) Title bar**
 (c) Menu bar (d) Standard bar
9. Which of the following can be used to move in a document?
 (a) Scrollbars (b) Mouse Pointer
 (c) Arrow keys **(d) All**
10. Which of the following is used to divide page in portions in Microsoft Word:
 (a) Table **(b) Columns**
 (c) Rows (d) Textbox
11. In MS Word, a commonly used key F1 serves the purpose of displaying:
 (a) Font (b) Find **(c) Help** (d) Color
12. Which of the following is used to draw geometrical shapes in MS Word?
 (a) Paints (b) Shapes
 (c) Word Art **(d) Auto shapes**
13. A text to be used repeatedly in document should be saved through:
(a) Auto text (b) Auto format
 (c) AutoSave (d) Autograph
14. The extension of MS Word document is:
 (a) .xlc (b) .wpd (c) .dot **(d) .doc**
15. Which option in File menu is used to close a file in MS Word?
 (a) New (b) Quit **(c) Close** (d) Exit
16. Keyboard shortcuts for Save As is:
 (a) Ctrl+F5 (b) Ctrl+G
 (c) F5 **(d) F12**
17. The shortcut key for renaming a file in MS Word is:
 (a) F4 **(b) F2** (c) CTRL+F4 (d) F1
18. Which of following key is used to open an existing document?
 (a) CTL+P **(b) CTRL+O**
 (c) CTRL+SHIFT+O (d) ALT+O
19. The default document name at the start of MS Word is:
(a) Document1 (b) File1
 (c) WPD1 (d) Word1
20. Which menu contains the Save option in MS Word?
 (a) Edit menu (b) Tools menu
 (c) View menu **(d) File menu**
21. Clipboard stores:
 (a) Entered text **(b) Copied text**
 (c) Deleted text (d) Repeated text
22. The Copy option is used to:
 (a) Move text **(b) Duplicate text**
 (c) Revise text (d) Delete text
23. Keyboard shortcuts for cut, copy and paste are:
(b) Ctrl+X, Ctrl+C and Ctrl+V
 (c) Ctrl+C, Ctrl+Y, Ctrl+P
 (d) Alt+X, Alt+C, Alt+X
24. Which of following key is used to bold a text:
 (a) CTRL+SHIFT+B (b) CTRL+ALT+B
(c) CTRL+B (d) CTRL+D
25. The process of changing color, size, style is called:
 (a) Styling (b) Typing
 (c) Composing **(d) Formatting**
26. Which of following way is not used to align the text?
(a) Top (b) Left (c) Right (d) Center
27. Which option is used to align text both on left and right margins?
 (a) Center **(b) Justified**
 (c) Right (d) Left
28. What appears below misspelled words in MS Word?
 (a) Green line **(b) Red line**
 (c) Blue line (d) Orange line
29. What appears below grammatically wrong words in MS Word?
(a) Green line (b) Red line
 (c) Blue line (d) Orange line
30. Shortcut key for Spelling & Grammar check is:
 (a) F3 (b) F8 (c) F2 **(d) F7**

IT, Computer and Internet

- Who was the inventor of computer?
(a) Douglas Engelbart
(b) Ada Lovelace
(c) Charles Babbage
(d) None of these
- Who was the inventor of computer programme?
(a) Douglas Engelbart
(b) Ada Lovelace
(c) Charles Babbage
(d) None of these
- Who was the founder of Microsoft Company?
(a) Douglas Engelbart
(b) Ada Lovelace
(c) Charles Babbage
(d) Bill Gates
- Who was the inventor of Mouse?
(a) Douglas Engelbart
(b) Ada Lovelace
(c) Charles Babbage
(d) None of these
- Which is the largest search engine of internet?
(a) Yahoo (b) Google
(c) Ask (d) MSN
- Which is the largest software company of computers?
(a) Microsoft (b) Dell
(c) IBM (d) My space
- Which is the largest hardware company of computers?
(a) Microsoft (b) Dell
(c) HP (d) My space
- A computer mainly consists of electronic:
(a) Circuits (b) Devices
(c) Chips (d) Parts
- Which is the oldest search engine of internet?
(a) Yahoo (b) Google
(c) Aliweb (d) MSN
- Time required for a computer to locate and transfer data is called:
(a) Analogue time (b) Basic time
(c) Starting time (d) Access time
- Mention the most universal character-coding set?
(a) ANSI (b) PASCAL
(c) UASCII (d) ASCII
- What is Backbone?
(a) A network that connects other networks
(b) A server
(c) A large computer
(d) None of them
- What is BASIC (Beginners All-purpose symbolic Instruction code)?
(a) A programming language
(b) A software
(c) Software coding
(d) A diploma course
- Term an ASCII text file which contains a list of DOS commands and program names?
(a) Batch program (b) Batch file
(c) Both of them (d) None of them
- Which of the following is a conventional designation of pre-released software?
(a) Alpha (b) Omega
(c) Raw (d) Beta
- Name the binary digit that is the smallest unit of digital information, either on or off, 1 or 0?
(a) Bitmap (b) Bit
(c) Bit/second (d) Byte
- What does mean by BIOS?
(a) Basic Input/output system
(b) Beginning Input/output system
(c) Basic Ingoing/outgoing system
(d) Basic In/out system
- There is a temporary storage place for information in computer. What is it called?
(a) Backup (b) Buffer
(c) Binary file (d) Data recorder
- Which of the following is a part of a chip or circuit board that is designed to send and receive data?
(a) Conductor (b) Loop
(c) Circuit (d) Bus
- Term the amount of memory that is needed to specify one ASCII character, eight bits?
(a) Bit (b) Kilo byte
(c) Byte (d) Mega byte

21. Pick out the way of describing the architecture of an integrated circuit?
(a) Map (b) Hardware
(c) Chipset (d) Bridges
22. Computer using resources or services provided by a remote machine is called client. What this remote machine is called?
(a) Host (b) Server
(c) Both of them (d) none of them
23. What are the called those images that are available for use on computers?
(a) Bitmaps (b) Clipart
(c) Resources (d) Database
24. COM Port is a connection on an IBM or compatible computer where you plug in the cable for a serial device. Mention another name for COM Port?
(a) USB port (b) Connection
(c) Serial Port (d) Stat
25. Serial ports are smaller than parallel ports. How many pins are there in serial ports?
(a) 8 (b) 7
(c) 9 (d) 6
26. In order to carry out an action in computer we choose a word or phrase that is usually found in menu. What is it called?
(a) Command (b) Request
(c) Order (d) Quest
27. There is a text file that DOS reads when booting which instructs the computer about the configuration of the machine. What is called this text file?
(a) BIOS (b) MS-DOS
(c) Config.sys (d) BASIC.
28. Name the data that is sent to the computer by a web server that records those computers actions on a certain web site?
(a) Database (b) Feedback
(c) Daisy chain (d) Cookie
29. CPU means central processing unit. What is referred by the term?
(a) Principle microchip that the computer is built around
(b) Box that houses the main components of computers
(c) Both of them
(d) None of them
30. Which of the following is used metaphorically to describe the virtual world of computers?
(a) Cyberworld (b) Cyberspace
(c) Virtualworld (d) Virtual space
31. What is called a structured set of data that is normally associated with software to access and manipulate that data?
(a) Database (b) Backup
(c) Storage (d) Hard disk
32. What is called preset value for some option in a computer programme?
(a) Built-in (b) Default
(c) Programming (d) None of them
33. Mention the term for the screen background in the most graphical user interfaces (GUIs) on which windows, icon, and dialog boxes appear?
(a) Screen saver (b) Desktop
(c) Taskbar (d) Screen
34. Name the part of structure for organizing files on a disk?
(a) Directory (b) Classification
(c) Arrangements (d) Data organizer
35. What is termed the portion of RAM set aside for temporarily holding information read from a disk?
(a) ROM (b) Cache memory
(c) Bus (d) Disk Cache
36. What is document?
(a) a data file (b) a software
(c) a programme (d) an input device
37. What is called the high-capacity optical disc that looks like a CD, but can store much information than CD?
(a) Digital Versatile Disc (DVD)
(b) Super Density disc (SD)
(c) Digital Video Disc (DVD)
(d) All of these
38. A CD can store 650 MB of data. How much data can be stored in a single-layer, single-sided DVD?
(a) 3 GB (b) 4 GB
(c) 2.5 GB (d) 8.5 GB
39. A method of transferring information (often text message) from one computer to another over a network is called:
(a) Electronic Mail (E-Mail)
(b) FAX
(c) Downloading
(d) Data transfer
40. What is called is the coding or scrambling of information in a file. So that it can only be decoded and read by someone who has the correct decoding key?
(a) Encryption (b) Java applet
(c) Firewall (d) Encoding
41. What is extension?
(a) The period and up to three characters at the end of a filename
(b) A special file used on Macintosh computers to add extra functionality to the system
(c) Both of them
(d) None of them
42. What is referred by the term FAT (File Allocation Table)?

- (a) A special file in which MS-DOS stores information on the layout of a disk
 (b) An application which is compiled with code to run on two platforms
 (c) Both of them
 (d) None of them
43. There is a modem which can handle FAX protocols and also transmit data. What this data is called?
 (a) FAX Modem (b) Data modem
 (c) Both of them (d) None of them
44. A program, document, utility—that isn't hardware on a computer is termed as:
 (a) Software (b) Data
 (c) Extension (d) File
45. What is used in a computer to protect a networked server from damage by those who log in to it?
 (a) Antivirus (b) Firewall
 (c) Gateway (d) Flow Control
46. What is called a graphical representation of a directory or subdirectory?
 (a) Directory (b) Folder
 (c) Partition (d) Extension
47. What is format?
 (a) Preparing a disk for use by your hardware and operating system
 (b) The way text is set up on a page
 (c) The way information is structured in a file
 (d) All of these
48. To copy files between the local system and any system reachable over the network is called FTP. What denotes FTP?
 (a) First Transfer Protocol
 (b) File Transfer Procedure
 (c) File transfer protocol
 (d) None of these
49. Gateway acts as a bridge between two applications or networks so that data can be transferred between a numbers of computers. What is it?
 (a) Hardware (b) Software
 (c) None of them (d) Both of them
50. Name the disk drive which contains one or more disks permanently sealed in it and is noted for their speed and high capacity?
 (a) Hard disk (b) Floppy disk
 (c) Hard drive (d) RAM
51. What is hardware?
 (a) Hard disk
 (b) Processor
 (c) Computer machinery
 (d) Motherboard
52. Which of the following terms is used to describe the starting point, or main page of a web site?
 (a) First page (b) Links page
 (c) Initial page (d) Home page
53. Name the computer that acts as a server for other computers on the network?
 (a) Mainframe (b) Host
 (c) Main server (d) Master
54. Which protocol is used for transferring html and related files, usually from www sites?
 (a) Hypertext Markup language (HTML)
 (b) Java script
 (c) Java Applet
 (d) Hypertext Transfer Protocol (HTTP)
55. What is referred by the term 'Hypertext'?
 (a) That links a PC to server
 (b) Text which is used between a PC and ISP
 (c) Text which can be read with special software
 (d) Text that links to other information
56. There is a process in which an item or file is moved into an application or environment which is different than that native to it. What is it called?
 (a) Download (b) Transfer
 (c) Import (d) Protocol
57. What is called the part of a computer, programme, or peripheral that communicates with other components?
 (a) Bus (b) Interface
 (c) Conductor (d) Link
58. Name an internal or private internet that is used strictly within the confines of a company, university etc?
 (a) Home net (b) Ethernet
 (c) Net (d) Intranet
59. The kernel provides low-level services. Which of the following is included in Kernel's services?
 (a) Hardware-software interaction
 (b) Memory management
 (c) Both of them
 (d) None of them
60. Kilobyte, 1024 bytes, usually abbreviated K. Where is it used?
 (a) Discussing memory
 (b) Hard drive storage
 (c) Both of them
 (d) None of them
61. Which term is used for a group of personal computers linked together in order to share programmes, data and peripherals?
 (a) LAN (Least Area Network)
 (b) LAN (Local Area Network)
 (c) LAN (Less Area Network)
 (d) LAN (Long Area Network)
62. LPT1 is the name used by MS-DOS. What is referred by this term?
 (a) The first USB port on a computer

- (b) The first socket on a computer
 (c) The first parallel port on a computer
 (d) The first com port on a computer
63. Megabyte is usually abbreviated MB or Mb. How many kilobytes are there in Megabyte?
 (a) 1000 (b) 1024
 (c) 1100 (d) 998
64. What is termed the temporary storage area for information and applications?
 (a) Cache (b) Memory
 (c) Storage (d) Kernel
65. A small, silicon object which contains microscopic circuitry is termed as:
 (a) Processor (b) Microchip
 (c) Transistor (d) Chipset
66. Modulate-Demodulate is a communications device that enables a computer to transmit information over a telephone line. By what name it is popular?
 (a) Scanner (b) Modem
 (c) Modulator (d) None of these
67. The CPU is located on the main circuit board in a computer. What this board is called?
 (a) Motherboard (b) Fatherboard
 (c) Mainboard (d) Base-board
68. Which of the following is disk operating system, produced by Microsoft that is the most common operating system for IBM and compatible PCs?
 (a) IBM-DOS (b) MS-DOS
 (c) OS/2 (d) Unix
69. Term the computer applications involving text, graphics, audio and video, or computers that are designed to provide high quality graphics and audio?
 (a) Multimedia (b) Hypermedia
 (c) Highmedia (d) Complete-media
70. OCR stands for 'Optical Character Recognition'. What is its function?
 (a) Scan the text of printed paper into a computer
 (b) Recognize photograph
 (c) Separate colours in a colour object
 (d) None of these
71. Pick out the term for the connection on an IBM PC or compatible computer usually named LPT1, where is plugged in a cable for a parallel printer?
 (a) Common Port (b) Com Port
 (c) Serial Port (d) Parallel Port
72. Which of the following is the section of a hard drive?
 (a) Partition (b) Room
 (c) Space (d) Division
73. What is referred by 'path'?
 (a) Specifies the location of a software
 (b) Specifies the location of a hardware
 (c) Specifies the location of a web
 (d) Specifies the location of a file
74. PDF is the abbreviation for:
 (a) Published Document Format
 (b) Pure Document Format
 (c) Portable Document Format
 (d) Printable Document Format
75. What is called a hardware item that can be attached to a computer to increase its functionality, such as a printer or monitor?
 (a) Accessory
 (b) Additional devices
 (c) Peripheral
 (d) Devices
76. Smallest graphic unit that can be displayed on the screen, usually a single coloured dot is called:
 (a) Pixel (b) Pet
 (c) Picture element (d) All of these
77. Name the hardware standard for auto configuration, which requires operating system support?
 (a) Autoconfig
 (b) Plug and Play (PNP)
 (c) Built in
 (d) Plug and Run
78. Which of the following ports are commonly used in computer?
 (a) Serial (b) Parallel
 (c) USB (d) All of these
79. What is called the memory that can be used by applications to perform necessary tasks while the computer is on?
 (a) Cache memory
 (b) Random Access Memory (RAM)
 (c) Hard memory
 (d) Volatile memory
80. A portion of RAM that is used as if it were a disk drive is called:
 (a) RAM Disk (b) Virtual drive
 (c) Both of them (d) None of them
81. What is virtual memory?
 (a) A temporary memory in a hard disk
 (b) A permanent memory in a hard disk
 (c) Method of using hard disk space to provide extra memory
 (d) None of these
82. A portion of RAM that is used as if it were a disk drive is called:
 (a) RAM Disk (b) Virtual drive
 (c) Both of them (d) None of them
83. The process of finding and removing errors in computer programmes is called:
 (a) Decoding (b) Recycling
 (c) Debugging (d) Re activating
84. What is ASCII?

- (a) American School of Computer Information Interchange
 (b) American Standard Code for Information Interchange
 (c) Asian Standard Code for Information Interchange
 (d) American Standard Code for Intelligent
85. A device which encodes characters by the depression of keys is known as:
 (a) Printer (b) Keyboard
 (c) Mouse (d) Hard drive
86. The area inside a computer frame and auxiliary where data and instructions are stored is called:
 (a) Memory (b) Interpreter
 (c) Recorder (d) Hopper
87. CT Scan stands for computerized technology
 (a) Computerized tomography
 (b) Computer technology
 (c) All of above
 (d) None of the above
88. URL stands for
 (a) Uniform Research Locator
 (b) Universal Resource Locator
 (c) Uni Relative Locator
 (d) Uniform Resource Locator
89. RAM stands for
 (a) Room Amplified Modulator
 (b) Random Access Memory
 (c) Random Access Memo
 (d) None of the above
90. Which one is an Operating System?
 (a) Harvard Graphics
 (b) Windows 2000
 (c) MS-Office
 (d) C++
91. Which of the following is an internal memory of a computer?
 (a) Floppy Discs (b) USB
 (c) RAM (d) CDs
92. When using computers which of the following involves reducing the electricity consumed or environmental waste generated?
 (a) Green Computing
 (b) Cyclic Process
 (c) Violation
 (d) Manufacturing
93. In a Word document this describes the size, weight, and spacing of a character.
 (a) Font (b) Points
 (c) Typeface (d) Typography
94. Which of the following is an example of Database Management System?
 (a) Adobe Photoshop
 (b) US Power Point
 (c) MS Word
 (d) ORACLE
95. When you insert a comment in a document, the comment appears in a:
 (a) New window (b) Balloon
 (c) Sticky note icon (d) Sidebar
96. Speed of LaserJet printer is measured in:
 (a) Character per second
 (b) Page per minute
 (c) Line per minute
 (d) Character per minute
97. A computer cannot function without:
 (a) Microsoft Office
 (b) Operating System
 (c) Internet Connection
 (d) Antivirus Protection
98. Which is the full form of Wi-Fi?
 (a) Wireless Fidelity
 (b) Wired Fidelity
 (c) Wireless Focus
 (d) Wireless Field
99. A computer virus is:
 (a) A Micro organism
 (b) Electromagnetic waves entering computer through a network
 (c) A useful micro component of a computer
 (d) A computer programme
100. Which of the following files have an .mpg extension?
 (a) Audio (b) Image
 (c) Video (d) Flash
101. CD is an optical disk format that is used to hold:
 (a) Pre-recorded text
 (b) Graphics
 (c) Sound
 (d) All of these
102. Which of the following keyboard shortcut is used to reverse the last action in Microsoft Word?
 (a) Ctrl + Z (b) Ctrl + X
 (c) Ctrl + Y (d) Ctrl + U
103. What is full form of DSL in terms of information technology?
 (a) Digital System Line
 (b) Digital Super Line
 (c) Digital Subscriber Line
 (d) Digital Speed Line
104. What is the shortcut key for page break in MS Word?
 (a) CTRL + Enter (b) Shift + Enter
 (c) Space + Enter (d) None of these
105. "Add New Hardware" option exists in:
 (a) Title bar (b) Status bar
 (c) Control Panel (d) Taskbar
106. A Hyperlink is:
 (a) A word phrase that, when clicked, displays another document
 (b) A scripting language

- (c) A world wide web gateway
(d) A system that employs multimedia resources
107. Which of the following is not an Operating System?
(a) DOS (b) Linux
(c) Windows (d) Oracle
108. When you are working on a document, by default Word automatically saves your document:
(a) Every 10 minutes
(b) Every 10 seconds
(c) When you close the document
(d) When you close the application
109. In MS Excel, A worksheet range is a:
(a) A command used for data modeling
(b) A range of values such as from 23 to 234
(c) A group of cells
(d) A group of worksheets
110. Who invented the World Wide Web (WWW) with Robert Cailiau?
(a) Laiszlo Neztjev
(b) Tom Burns
(c) Tim Berners Lee
(d) Fred Zukerburg
111. A _____ is a data communication system within a building, plant, or campus, or between nearby buildings.
(a) MAN (b) LAN
(c) WAN (d) None of these
112. F1, F2 to F12 these keys are called:
(a) Numeric Keys
(b) Alpha Function Keys
(c) Function Keys
(d) None of these
113. Embedded Formula in MS EXCEL can be removed by pressing:
(a) BACKSPACE (b) PAGE DOWN
(c) DELETE (d) END
114. Which key is used to move at the end of a paragraph?
(a) HOME (b) PAGE DOWN
(c) END (d) ENTER
115. Which of the following terms is known as half-byte?
(a) Nibble (b) Giga-byte
(c) Tera-Byte (d) Quibble
116. What does Boot means in computing language?
(a) To load an operating system
(b) To start RAM
(c) To initiate ROM
(d) None of these
117. When collection of various computers seems a single coherent system to its client, then it is called
(a) Computer network
(b) Distributed system
(c) Networking system
(d) none of the mentioned
118. Term which refers to the sharpness or clarity of an image, is
(a) pitch (b) pixel
(c) resolution (d) signal
119. Which of the following is an operating system?
(a) Microsoft Word (b) Windows 2000
(c) Java (d) Outlook
120. What is the keyboard shortcut for creating a chart from the selected cell range?
(a) F2 (b) F8
(c) F11 (d) F12
121. The brain of any computer system is
(a) ALU (b) Memory
(c) CPU (d) Control unit
122. Ctrl +] is used for
(a) Increase the font size
(b) Decrease the font size
(c) Increase the font colour
(d) None of above
123. In PowerPoint for black screen the short cut key used
(a) B (b) W
(c) L (d) P
124. Mainly which port is used in computer
(a) USB (b) Serial
(c) Parallel (d) All of above
125. To change text in Italic form
(a) Ctrl + I (b) Ctrl + B
(c) Ctrl + C (d) None of above
126. In MS Word Landscape is for
(a) Page Orientation
(b) Page Layout
(c) Page portray
(d) None of above
127. 1 byte is equal to
(a) 2 bit (b) 7 bit
(c) 8 bit (d) None of above
128. Which are the following hardware devices
(a) Motherboard (b) Processor
(c) Hard Disc (d) All of these
129. Michael Dell is one of the biggest names of
(a) Hollywood (b) Wall Street
(c) Computer World (d) American Politics

Answer Key

| | | | | | | | |
|-------|-------|-------|-------|-------|--------|--------|--------|
| 1. c | 18. b | 35. d | 52. d | 69. a | 86. a | 103. c | 120. c |
| 2. b | 19. d | 36. a | 53. b | 70. a | 87. a | 104. a | 121. c |
| 3. d | 20. c | 37. d | 54. d | 71. d | 88. d | 105. c | 122. a |
| 4. a | 21. c | 38. d | 55. d | 72. a | 89. a | 106. a | 123. a |
| 5. b | 22. c | 39. a | 56. c | 73. d | 90. b | 107. d | 124. d |
| 6. a | 23. b | 40. a | 57. b | 74. c | 91. c | 108. a | 125. a |
| 7. c | 24. c | 41. c | 58. d | 75. c | 92. a | 109. c | 126. a |
| 8. b | 25. c | 42. c | 59. c | 76. d | 93. a | 110. a | 127. c |
| 9. c | 26. a | 43. c | 60. c | 77. b | 94. d | 111. b | 128. d |
| 10. b | 27. c | 44. d | 61. b | 78. d | 95. a | 112. c | 129. c |
| 11. d | 28. d | 45. b | 62. c | 79. b | 96. b | 113. c | |
| 12. a | 29. c | 46. b | 63. b | 80. c | 97. b | 114. c | |
| 13. a | 30. b | 47. d | 64. b | 81. c | 98. a | 115. a | |
| 14. c | 31. a | 48. b | 65. b | 82. a | 99. d | 116. a | |
| 15. d | 32. b | 49. d | 66. b | 83. c | 100. b | 117. b | |
| 16. b | 33. b | 50. a | 67. a | 84. b | 101. d | 118. c | |
| 17. b | 34. a | 51. c | 68. b | 85. b | 102. c | 119. b | |



Info

Hub HRMS SIS SED

Computer One Lines MCQ's

- The output quality of a printer is measured by Dot per inch
- A byte is a group of 8 bits
- Those system software which one uses to translate high level language into low level language or machine language and vice versa are called Programming Language Translation
- Four nibbles are equal to Two Bytes Smallest unit of memory is Bit
- 1 Megabyte is equal to 1024 Kilobytes 1 Kilobyte is equal to 1024 Bytes
- The printer in which each letter is formed with the series of dots is called Dot Matrix Printer
- The programs which are required to run peripheral devices such as mouse keyboard, printer etc. are called Device Drivers
- Internet Search Engines Google was founded by Larry Page and Sergey Brin
- In the world of computer science LINUX is an operating System?
- Adobe company produces PageMaker, Photoshop and Acrobat.
- SIM stands for Subscriber identity module
- VGA stands for Video Graphic Array
- Mouse is an Input device
- Silicon is used in making of Computer Chips
- PNG is a file extension of Image
- In MS-Word Home key moves the cursor to the Beginning of the line
- In Ms Word the Tool used for finding a similar word in a Document is called Thesaurus
- The computer program that contains instructions to operate a device is called Device driver
- In Computer Science a device which encodes characters by the depression of Keys is known as Keyboard
- RAM stands for Random Access Memory
- HP is a famous brand of computer equipment. What does HP stand for Hewlett-Packard
- ATM is abbreviation of Automated Teller Machine
- Modem is used to send digital data over a phone line
- Servers are computers that provide resources to other computers connected to a Network
- Pea can fix nitrogen from air.
- CPU is an abbreviation of Central Processing Unit.
- RAM stands for Random Access Memory.
- The length of IP address is 32 bits
- Facebook was launched in 2004
- The docx file contains MS Office Word
- The file extension DLL stands for Dynamic Link Library
- The extension of a MS Access Database is mdb.
- The key combination used to permanently delete a file from Windows computer is Shift + delete
- Data is permanently stored in Hard Disk
- What are the steps to upgrade a 32-bit version to a 64-bit version of Windows? Ans. It cannot be upgraded
- To change a lowercase letter to uppercase and uppercase letter to lowercase select? Sentence Case
- CSS stands for Cascading Style Sheets
- The general format of the URL is as follows: type: // Address /path /
- The computer abbreviation "OS" stands for: Operating System
- How many versions of Windows 8 for PC have been released? 3 versions
- A group of 8 bits is called Byte
- The file extension .jsp stands for: Java Server Page
- What is the full form of WWW? World Wide Web

- The microphone converts the sound into: Electrical Signals
- A device which connects multiple nodes to the network is: A hub
- Windows 7 was released in which year? It was released to manufacturing on July 22, 2009 and became generally available on October 22, 2009.
- What is Windows XP? An operating system
- ATM stands for: Automated Teller Machine
- Which one of these is used to find information on World Wide Web? Search Engine
- ".gif" is an extension of which type of file? Image
- The founder of IBM Company? Thomas J. Watson
- Volatile Memory is: Ram
- When you delete an object, Windows XP sends it to: Recycle Bin
- A folder in windows c can't be made with the name: Com/Com 1/Com2/Com3
- Copying a software without purchasing it is Software Piracy
- What is the use of Firewall in a computer? For security
- What is the full form of ISO? International Standard Organization
- A network that covers large area, city, country and World is called: WAN
- What is the official Twitter bird's name? Larry
- Frequency is measured in: hertz
- Program that contain instructions to operate a device is called Device Driver
- The keys starting with character F1 to F12 are: Function Keys
- Which one of these is not a feature of Windows 8? Urban user interface
- What was the old domain name of Facebook? thefacebook.com
- Google was founded in: 1996
- The first Tweet on Twitter was sent: March 21, 2006
- What is HTML? Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications.
- 1 byte consists of: 8 bits
- What is the full form of IP? Internet Protocol
- BASIC is the abbreviation of: Beginners Anti Purpose Symbolic Instruction Codes
- SOAP stands for: Small Object Access Protocol
- Microsoft Windows 8 is: An Operating System
- Which of the following features allow Windows 10 to adapt to different device types? Continuum
- Maximize, Minimize and Close button are called: Control Button
- Twitter is a Social networking website.
- Personal Computers are also known as: Microcomputer
- Dr. Solomon and McAfee are popular: Anti-Virus
- Red wavy lines under text indicate: Spelling Mistakes
- The .software that are available free of cost are called: Freeware
- By default the bar located at the bottom of the Desktop is: Taskbar
- The transfer of data from one place to another is called: Data Communication
- Green wavy lines under text indicate? Grammatical Mistake
- SQL is a (n): Structured Language
- Windows 8 was released in which year? 2012
- Which one is an Operating System? Windows Vista
- A Terabyte represents about: 1 trillion bytes
- The file extension PNG stands for: Portable Network Graphic File
- The card which is used for internet: Modem Card
- In Windows 10, what is the shortcut key to open programs that are pinned to task bar? Windows + [1] [2] [3] [...]
- What is meaning of .mng? Multiple Network Graphic
- Windows 7 is preceded by which version of the windows? Windows Vista
- What is the name of new built-in browser includes in Windows 10? Super Internet Explorer Pro
- Analog signal is measured in: Volts
- In Windows 7, what is the shortcut key for creating a New Folder? Ctrl + Shift + N
- What is the full form of TCP? Transmission Control Protocol
- Arithmetic Logic Unit (ALU) can do: Logical Operation, Mathematical Operation
- The total number of function keys in a computer keyboard are: 12
- A bit can be 1 or 0
- Which of the following protocol is used to access Webpages on World Wide Web? HTTP

- Which of the following option is not true for FORTRAN? Translation
- A network that covers small geographic area or single or group of buildings is called: LAN
- Which one of the following is Internet Protocol? TCP/IP
- The upper most bar showing the name of the application is called: Title Bar
- Which of the following is the founder of Facebook? Mark Zuckerberg
- By default, the bar located at the bottom of the desktop is: Taskbar
- What is the full form of Wi-Fi? Wireless Fidelity
- The output of the printer is known as: Hard Copy
- Which of the following is an email client? Yahoo
- Laser beam technology is used in one of the following: Optical Disks
- All the files deleted from computer are stored in Recycle Bin
- What is the full form of PDF? Portable Document Format
- The Google IPO was done in: 2004
- A Search Engine is: A website that look through databases for matching criteria
- Windows 10 was launched in which year? 2015
- Printer is an example of: Hardcopy
- Who invented the Qwerty Keyboard? Christopher Latham Sholes
- A set of raw, unprocessed facts, figures and symbols is called: Data
- Windows XP was released in: 2001
- Windows XP was succeeded by: Windows Vista
- Half byte = 1 nibble = 4 bits
- Bit means Binary Digit
- 1 byte = 8 bits
- 1 mega byte = 1048576 bytes
- 1 kilo byte = 1024 bytes
- A combination of 16 bits are called word.
- A terabyte = 1 trillion bytes
- Our PC belongs to 4th generation
- Fred Cohen coined the word computer virus
- First computer virus was created in 1970 at Bell laboratories
- WORM means Write Once Read Many
- Power of a super computer is measured in FLOPS (Floating Point Operations per Second)
- WWW/http: (hypertext transfer protocol) was created by Tim Burner Lee in 1992
- Intel means Integrated Electronics
- 1 worksheet contains 256 columns
- G.W.Basic G.W stands for Gate Way
- Super Computer was created by J.H.Van Tassel
- CORBA is Common Object Request Broker Architecture
- URL is Uniform Resource Locator
- Intel invented RAM chip
- Information stored on disk as series of bumps on its shiny side.
- DVDs hold more information than CDs. They use smaller bumps and have two reflective layers
- Recordable CDs do not have bumps. There are patches of color on disk to change the reflected laser light
- In 1951 Univac -- 1, the world's first commercial computer was designed by John Mauchly and J. Presper Eckert. They built ENIAC, the first electronic computer in 1946
- In 1968 mainframe was built.
- In 1976 first supercomputer the Cray-1 was developed
- In 1981 IBM produce the IBM PC.
- In 1998 IBM made quantum computer
- Super computers uses parallel processing
- In 1974, computer games were introduced
- PROM is the abbreviation of programmable read only memory
- What was the world's first high level programming language 1957: IBM FORTRAN
- A JPEG is a picture file format - what does JPEG stand for: Joint Photographic Experts Group
- During World War II, IBM built the computers the Nazis used to manage their death/concentration camps
- Registers are temporary storage areas within the CPU.
- First apple computer was built in garage.
- The language of small talk is object oriented.
- Shell is an operating environment.
- Virtual memory is also known as virtual page.
- NOS refer to operating systems for a network.
- In EBCDIC each character is denoted by 8 bits.
- Diodes are used in analog computer circuits as limiter.
- Wetware stands for any organic intelligence.

- GIGO stands for garbage in garbage out.
- Application of flip-flap are counters, shift register and transfer register.
- Bootstrap is associated with computer.
- FORTRAN stands for formula translator.
- A group of character that is termed as a single entity is called word.
- Clip art is a computer prepared art.
- Mark sensing is another term for OMR.
- Authorization to make multiple software copies is called site licensing.
- Antivirus is also known as vaccines.
- Free software is also known as public domain software.
- In computer DFD stands for Data Flow Diagram.
- Cyber Space is called to Virtual world of the computer.
- What does the sun in SUN Microsystems stand for Stanford University Network
- What does Intel stand for- Integrated Electronics
- All PCs have a BIOS what does bios stand for-Basic Input Output System
- What is the common name for an integrated circuit A Chip
- In WWW terms what does i.e. mean on a domain name-Ireland
- What company introduced the first commercial minicomputer 65 DEC
- The first web browser publicly available NCSA Mosaic
- The world's most powerful super computer is called ASCI white.
- World Wide Web was invented in 1993 by Tim Bareness Lee.
- The B-programming language was developed by Ken Thompson.
- The 1st commercially produced and sold computer (1951) was UNIVAC.
- The transformation from heavy computers to PCs was made possible using microprocessors.
- The first microprocessor was developed in 1971 by Intel.
- A pentium 4 (P-4) employs roughly 40 million transistors.
- Mark-1, Apple-1, and colossus were initial desktop computers.
- Binary digits are briefed as bit.
- A collection of bits is called byte.
- The first home computer (1977), which was sold in millions of units was Apple II.
- 'PARAM' is a supercomputer.
- Father of the Computer.. Charles Babbage
- The first computer was invented by Charles Babbage in the year 1822.
- Ada Lovelace, was the first programmer for this computer.
- The first patent for working computers was done by ENIAC in 1952.
- The very first microprocessor was invented in 1970 for the use in the electronic calculators.
- The first microprocessor was intel 4004 and was developed by Ted Hoff.
- A pointing device Mouse used in computer which functions by detecting the motion, consisting of one or more buttons was invented by Douglas Engelbart at the Stanford Research Institute in 1963.
- The first printer was developed by Remington Rand.
- In 1973, internet was developed by American Scientist V. Cerf, who was assigned a project by ARPA.
- The inventor of www is Tim Berner Lee as well as Robert Cailliau in the year 1990. It is the most popular service on the internet. It is a system for organizing as well as linking internet files, resources, and services and providing access to them.
- Bill Gates and Paul Allen are the founders of Microsoft. It was founded in the year 1975 at Albuquerque, New Mexico.
- Microsoft was founded to develop BASIC interpreters for the Altair 8800
- C programming language was developed by Dennis Ritchie in 1972 at Bell Telephone laboratories to use in Unix operating system. Basically it was developed for the implementation of system software, it has been used even in developing application software.
- Email which stands for Electronic Mail was invented by Ray Tomlinson in the year 1971 and initiated in using "@" sign for separating user name and machine.
- EBay managed by an American company was started by Pierre Omidyar, on September 3, 1995.
- Wiki, as the name suggests, is an online guide or dictionary for anyone to access information online. Wikipedia was invented by Jimmy Wales and Larry Sanger in the year 2001 and previously known Nupedia from 1996-97.
- MySpace is a social networking website is

invented by Tom Anderson. It was launched in August 2003 and the headquarters is based in Beverly Hills, California

- Digital Computer" was invented by Howard Aiken
- Abacus is considered as the first known counting device and it was originated from Asia. Abacus worked on a place-value notion meaning that the place of a bead or rock on the apparatus determined how much it was worth.
- In 1642 a French mathematician and philosopher Blaise Pascal invented the first mechanical digital calculator using gears known as the Pascaline.
- In 1812 Charles P. Babbage later known as the "father of the computer", designed a machine, the difference engine which was steam-powered, fully automatic and commanded by a fixed instruction program.
- In 1947 the giant calculating device ENIAC (Electrical Numerical Integrator and Calculator) machine was developed by John W. Mauchly and J. Presper Eckert, Jr. at the University of Pennsylvania.
- In early 1960s Gene Amdahl designed the IBM System/360 series of mainframe computers, which considered as the first general purpose digital computers which uses integrated circuits.
- In 1961 Dr. Hopper developed the COBOL (Common Business Oriented Language) programming language.
- In 1964 the International Business Machines (IBM) publishes and marketed the term "word processor"
- In 1965 Dr. Thomas Kurtz and Dr. John Kemeny developed BASIC (Beginners All-purpose Symbolic Instruction Code) programming language
- In 1969 the Internet was started.
- In 1969, computers were first used to communicate synchronously.
- In 1970 Dr. Ted Hoff developed the famous Intel 4004 microprocessor (G) chip.
- In 1971 the Intel released the first microprocessor, a specialized integrated circuit which was able to process four bits of data at a time.
- In 1976 Apple Computers was founded by Steven Jobs and Stephen Wozniak.
- In 1981 the IBM PC was introduced with a 16-bit microprocessor.
- Bit means Binary Digit
- 1 byte is equal to 8 bits
- 1 megabyte is equal to 1048576 bytes A terabyte is equal to 1 trillion bytes
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- 1 kilo byte is equal to 1024 bytes
- A combination of 16 bits are called word.
- Saverin is one of five co-founders of Facebook.
- Google was founded by Lawrence E. Page and Sergey M. Brin while they were students at Stanford University. Google Inc was incorporated on September 4, 1998.
- The first Apple computer, Apple-I was invented by Steve Jobs and Steve Wozniak in the year 1976 under the company name Apple Computers Inc.
- Bluetooth technology was firstly introduced by telecommunication manufacturer Ericsson, based in Sweden in 1994.
- USB (Universal Serial Bus) was invented and developed by Vijay Rhatti in 1996.



General Computer Functional Keys

- ❖ **Ctrl + A :** *Select All*
- ❖ **Ctrl + B:** *Bold*
- ❖ **Ctrl + C:** *Copy*
- ❖ **Ctrl + D:** *Font*
- ❖ **Ctrl + E :** *Center Alignment*
- ❖ **Ctrl + F :** *Find*
- ❖ **Ctrl + G:** *Go to*
- ❖ **Ctrl + H:** *Replace*
- ❖ **Ctrl + I :** *Italic*
- ❖ **Ctrl + J :** *Justify Alignment*
- ❖ **Ctrl + K:** *Insert hyperlinks*
- ❖ **Ctrl + L :** *Left Alignment*
- ❖ **Ctrl + M:** *Increase indent*
- ❖ **Ctrl + N:** *New*
- ❖ **Ctrl + O:** *Open*
- ❖ **Ctrl + P:** *Print*
- ❖ **Ctrl + Q:** *Normal style*
- ❖ **Ctrl + R :** *Right Alignment*
- ❖ **Ctrl + S :** *Save / Save As*
- ❖ **Ctrl + T :** *Hanging Indent*
- ❖ **Ctrl + U :** *Underline*
- ❖ **Ctrl + V:** *Paste*
- ❖ **Ctrl + w:** *Close*
- ❖ **Ctrl + x:** *Cut*
- ❖ **Ctrl + Y:** *Redo*
- ❖ **Ctrl + Z:** *Undo*
- ❖ **Ctrl + 1 :** *Single Spacing*
- ❖ **Ctrl + 2 :** *Double Spacing*
- ❖ **Ctrl + 5 :** *1,5 lines*
- ❖ **Ctrl + Esc:** *Start menu*
- ❖ **F1:** *Running the help function provided on word*
- ❖ **F2:** *Altering name a file / folder*
- ❖ **F3:** *Running orders command*
- ❖ **F4:** *Repeating previous orders*
- ❖ **F5:** *Refresh*
- ❖ **F6.:** *Running other command pane*
- ❖ **F7:** *spelling Check*
- ❖ **F8:** *The beginning of the highlight / selection of text or object*
- ❖ **F9 :** *Menu update Field (Mail Merge)*
- ❖ **F10:** *Enable menu*

- ❖ **F11:** *Entering the next field (mail merge)*
- ❖ **F12:** *Activating the us save dialog*
- ❖ **ESC:** *Cancel dialogue / command*
- ❖ **Enter:** *Perform an option or end a paragraph*
- ❖ **Tab:** *Move text according to the existing tab tags on horizontal ruler*
- ❖ **Windows:** *Menu ktifkan start menu*
- ❖ **Shortcut:** *Activating shortcut at cursor position*
- ❖ **Delete:** *Remove 1 characters on the right of the cursor*
- ❖ **Backspace:** *Removing 1 characters on the left of the cursor*
- ❖ **Insert:** *Menu visit character in cursor position*
- ❖ **Home:** *Move cursor position to the beginning of the line*
- ❖ **End:** *Move cursor position to end of line*
- ❖ **Page Up:** *Roll the screen up*
- ❖ **Page Down:** *Roll the screen down*
- ❖ **Up:** *MOVE CURSOR 1 line up*
- ❖ **Down:** *MOVE CURSOR 1 line down*
- ❖ **Left:** *MOVING CURSOR 1 characters to left*
- ❖ **Right:** *MOVE THE CURSOR 1 characters to the right*
- ❖ **Num Lock on:** *Function typing numbers and active math operators*
- ❖ **NUM LOCK OFF:** *Active Navigation button function*
- ❖ **Shift + F10:** *Open the shortcut, just like clicking right*
- ❖ **Alt:** *Button emphasis that is not combined with other buttons only
Work to enable or start using bar menu*
- ❖ **Shift + Delete:** *Delete selected items permanently without placing items In
Recycle bin*
- ❖ **Ctrl + Right Arrow:** *Move the insertion point to the beginning of the next word*
- ❖ **Ctrl + Left Arrow:** *Move the insertion point to the beginning of the previous word*
- ❖ **Ctrl + Down Arrow:** *Move the insertion point to the beginning of the next paragraph*
- ❖ **Ctrl + Up Arrow:** *Move the insertion point to the beginning of the previous
paragraph*
- ❖ **Alt + F4:** *Close active items, or log out of active programs*
- ❖ **Alt + Enter:** *Displaying properties from selected objects*
- ❖ **Alt + Spacebar:** *Open the shortcut menu for active windows*
- ❖ **Ctrl + F4:** *Close active documents in programs that allow you To have
some open documents simultaneously*
- ❖ **Alt + Tab:** *Switch between open items*
- ❖ **Alt + ESC:** *Cycle through items in an open order*
- ❖ **Ctrl + shift + Tab:** *Move backwards through tabs*
- ❖ **Shift + Tab:** *Move backwards through*

Complete List of MS-Excel Shortcut Keys

- | | |
|-------------------|---|
| ❖ Ctrl+A | Select All |
| ❖ Ctrl+B | Bold |
| ❖ Ctrl+C | Copy |
| ❖ Ctrl+D | Fill Down |
| ❖ Ctrl+F | Find |
| ❖ Ctrl+G | Go to |
| ❖ Ctrl+H | Replace |
| ❖ Ctrl+I | Italic |
| ❖ Ctrl+K | Insert Hyperlink |
| ❖ Ctrl+N | New Workbook |
| ❖ Ctrl+O | Open |
| ❖ Ctrl+P | Print |
| ❖ Ctrl+R | Fill Right |
| ❖ Ctrl+S | Save |
| ❖ Ctrl+U | Underline |
| ❖ Ctrl+V | Paste |
| ❖ Ctrl+W | Close |
| ❖ Ctrl+X | Cut |
| ❖ Ctrl+Y | Repeat |
| ❖ Ctrl+Z | Undo |
| ❖ F1 | Help |
| ❖ F2 | Edit |
| ❖ F3 | Paste Name |
| ❖ F4 | Repeat last action |
| ❖ F4 | While typing a formula, switch between absolute/relative refs |
| ❖ F5 | Go to |
| ❖ F6 | Next Pane |
| ❖ F7 | Spell check |
| ❖ F8 | Extend mode |
| ❖ F9 | Recalculate all workbooks |
| ❖ F10 | Activate Menu bar |
| ❖ F11 | New Chart |
| ❖ F12 | Save As |
| ❖ Ctrl+: | Insert Current Time |
| ❖ Ctrl+; | Insert Current Date |
| ❖ Ctrl+'' | Copy Value from Cell Above |
| ❖ Ctrl+' | Copy Formula from Cell Above |
| ❖ Shift | Hold down shift for additional functions in Excel's menu |
| ❖ Shift+F1 | What's This? |

- ❖ *Shift+F2* *Edit cell comment*
- ❖ *Shift+F3* *Paste function into formula*
- ❖ *Shift+F4* *Find Next*
- ❖ *Shift+F5* *Find*
- ❖ *Shift+F6* *Previous Pane*
- ❖ *Shift+F8* *Add to selection*
- ❖ *Shift+F9* *Calculate active worksheet*
- ❖ *Shift+F10* *Display shortcut menu*
- ❖ *Shift+F11* *New worksheet*
- ❖ *Shift+F12* *Save*
- ❖ *Ctrl+F3* *Define name*
- ❖ *Ctrl+F4* *Close*
- ❖ *Ctrl+F5* *XL, Restore window size*
- ❖ *Ctrl+F6* *Next workbook window*
- ❖ *Shift+Ctrl+F6* *Previous workbook window*
- ❖ *Ctrl+F7* *Move window*
- ❖ *Ctrl+F8* *Resize window*
- ❖ *Ctrl+F9* *Minimize workbook*
- ❖ *Ctrl+F10* *Maximize or restore window*
- ❖ *Ctrl+F11* *Inset 4.0 Macro sheet*
- ❖ *Ctrl+F1* *File Open*
- ❖ *Alt+F1* *Insert Chart*
- ❖ *Alt+F2* *Save A*
- ❖ *Alt+F4* *Exit*
- ❖ *Alt+F8* *Macro dialog box*
- ❖ *Alt+F11* *Visual Basic Editor*
- ❖ *Ctrl+Shift+F3* *Create name by using names of row and column labels*
- ❖ *Ctrl+Shift+F6* *Previous Window*
- ❖ *Ctrl+Shift+F12* *Print*
- ❖ *Alt+Shift+F1* *New worksheet*
- ❖ *Alt+Shift+F2* *Save*
- ❖ *Alt+ =* *AutoSum*
- ❖ *Ctrl+ `* *Toggle Value/Formula display*
- ❖ *Ctrl+Shift+A* *Insert argument names into formula*
- ❖ *Alt+Down arrow* *Display AutoComplete list*
- ❖ *Alt+'* *Format Style dialog box*
- ❖ *Ctrl+Shift+~* *General format*
- ❖ *Ctrl+Shift+!* *Comma format*
- ❖ *Ctrl+Shift+@* *Time format*

In Photoshop Shortcut Keys

- ❖ *Ctrl + Shift + Alt + B* Black & White Layer
- ❖ *Ctrl + Shift + Alt + D* Convert to Smart objects
- ❖ *Ctrl + Shift + Alt + G* Gaussian Blur
- ❖ *Ctrl + Shift + Alt + J* New Layer via cut (show dialog)
- ❖ *Ctrl + Shift + Alt + N* New blank layer (No dialog)
- ❖ *Ctrl + Shift + Alt + V* Paste in Selection
- ❖ *Ctrl + Shift + Alt + Y* Reveal All
- ❖ *Ctrl + Shift + Alt + <* Decrease type size by 10 pt
- ❖ *Ctrl + Shift + Alt + >* Increase type size by 10 pt

Inpage Urdu Short Keys

- ❖ *Ctrl + A* Selects all
- ❖ *Ctrl + B* Applies or removes bold formatting
- ❖ *Ctrl + C* Copies selected text or graphics
- ❖ *Ctrl + F* Displays the Find and Replace dialog box, with the Find tab selected
- ❖ *Ctrl + G* Displays Paragraph Preferences dialog box
- ❖ *Ctrl + H* Displays Character dialog box
- ❖ *Ctrl + I* Applies or removes italic formatting
- ❖ *Ctrl + N* Creates a new document
- ❖ *Ctrl + O* Open Documents
- ❖ *Ctrl + P* Prints the current presentation
- ❖ *Ctrl + R* Displays the Find and Replace dialog box, with the Replace tab selected
- ❖ *Ctrl + S* Save a Document
- ❖ *Ctrl + V* Pastes cut or copied object or text
- ❖ *Ctrl + X* Cuts the selected text, graphics
- ❖ *Ctrl + Y* Import
- ❖ *Ctrl + Z* Undoes an action
- ❖ *Ctrl + F4* File Close
- ❖ *Ctrl + F5* Increases word to word spacing
- ❖ *Ctrl + F6* Decreases word to word spacing
- ❖ *Ctrl + F7* Superscripts selected text
- ❖ *Ctrl + F8* Subscripts selected text
- ❖ *Ctrl + F9* Decreases the font size by 1 point
- ❖ *Ctrl + F10* Increases the font size by 1 point
- ❖ *Ctrl + Spacebar* Toggle Language (Urdu to English & English to Urdu)
- ❖ *F5* Fit in windows

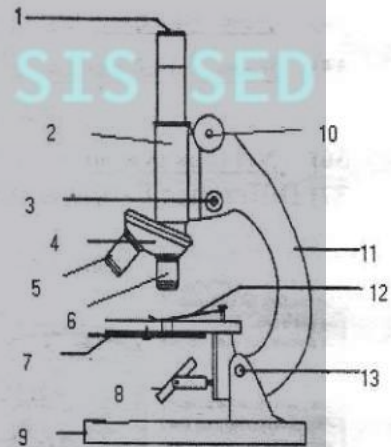
GENERAL SCIENCE

(جنرل سائنس)

Cellular Organization of Plants and Animals

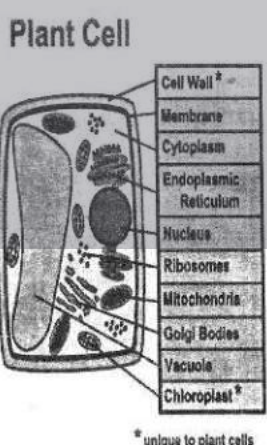
Unit No: 1

- 1) Those organisms which are made of **large number of cell** are called **multi-cellular** (کثیر الخلیات) **organisms**.
- 2) Those organisms which are made of **only one cell** are called **unicellular** (یک خلوی) **organisms**.
- 3) Unicellular organisms are **amoeba, paramecium, euglena, chlamydomonas**.
- 4) Cell-----> Tissue----->Organ----->System----->Organism
- 5) **Microscope** is an instrument which helps to see those things that cannot see with our naked eyes.
- 6) **“Micro”** means **small** and **“scope”** means **to see**.
- 7) **1) Eyepiece (ocular):** where you look through to see the image
- 8) **2) Body tube:** Holds the eyepiece and connects it down to the objectives
- 9) **3) Fine adjustment knob:** Moves the body of the microscope up/down more slowly; fine control. Gets the specimen exactly focused. We only use this after we first use the coarse adjustment knob.
- 10) **4) Nosepiece:** Rotating piece at the bottom of the body tube. Let's us choose between several lenses (objectives.)
- 11) **5) High power objective:** Used for high power magnification (the longer objective lens)
- 12) **6) Low power objective:** Used for low power magnification
- 13) **7) Diaphragm:** Controls amount of light going through the specimen
- 14) **8) Light/mirror:** Source of light, usually found near the base of the microscope.
- 15) **9) Base:** Supports the microscope
- 16) **10) Coarse adjustment knob:** Moves body of the microscope up/down more quickly; Gets specimen approximately focused.
- 17) **11) Arm:** Holds main part of the microscope to the base.
- 18) **12) Stage clips:** Hold the slide in place.

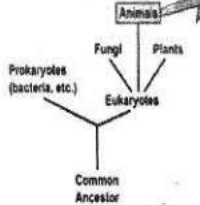
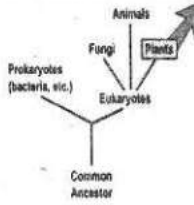
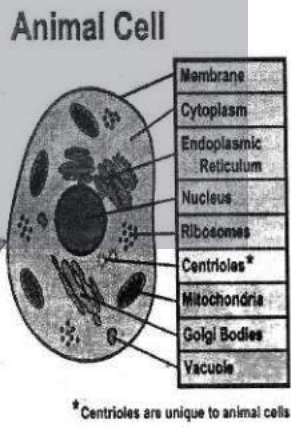


- 19) **13) Inclination joint:** Use to tilt the microscope.
- 20) A **cell** is the unit of structure and function of a **living organism**.
- 21) First main Difference between animals and plants cell is that the outer most covering in plant cell is **cell wall**.
- 22) The second one is cell **membrane** is present under the cell wall in plants. But it is the outer most covering of the animal cell.
- 23) **Cytoplasm** (ظلماء) is a thick viscous (مؤازحہ) liquid which fills the space between the nucleus and the cell membrane.
- 24) **Centrioles:** Animal cells contain organelles known as centrioles, which are not present in plant cells. Centrioles help move chromosomes during **cell division**.
- 25) **Vacuole** is a sac (تھیلی) like structure which store **waste material** for some time before removal from the body.
- 26) **Vacuole:** **Animal cells** may have **many tiny vacuoles**.
- 27) A plant cell usually has a **single large vacuole**, which serves as a storage tank for food, water, waste products, and other materials.
- 28) **Nucleus** is the most important part of the cell. It controls all activities of the cell.
- 29) **Plant cell** has **chloroplast** which has green pigment called **chlorophyll** (پودوں اور پتوں کو سبز رنگ دینے والا مادہ). It helps plants to prepare its own food.
- 30) **The largest cell** is the **egg** of an **Ostrich**.
- 31) **Many organs** when work together makes a **system**.
- 32) Mouth stomach, small intestine liver etc. work together to make **digestive system**.
- 33) **Heart, vessels called veins and arteries** make **circulatory system**.
- 34) **Nose, windpipe and lungs** make **respiratory system** (نظام تنفس).
- 35) **Removal of wastes** from the body and nervous system (اعصابی نظام) for overall control of the body is called **excretory system** (نظام اخراج).
- 36) **Nervous system** is made up of **brain, spinal cord** and **nerves**.
- 37) **Difference between animal and plant cell.**

Primary Differences
 Plant cells need to perform two functions not performed by animal cells:
 1. produce their own food
 2. support their own weight
 These account for the primary differences between plant and animal cells.



Eukaryotes
 Plant and animal cells are both Eukaryotic (which means that the cells contain a nucleus), and have many structures and functions in common. Compare this animal cell to the plant cell in the diagram below.



Sense Organs

Unit No: 2

58) There are five sense (حس) organs in humans. (Eye, Nose, Ear, Tongue, and skin)

EYE

59) Eye consists of three coats (a) Sclerotic (الغشاء الكاظمي) (b) Choroid (c) Retina

60) **Sclerotic:** The Sclerotic layer is the outermost white part of the eye, it protect the inner part of the eye.

61) The cornea is the transparent front part of the eye that covers the iris and pupil.

62) Colored part of eye is called iris.

63) The dark whole of the iris is called pupil.

64) Behind the pupil lies a lens which is attached to muscles.

65) **Choroid:** Choroid is the middle layer of the eye.

66) Choroid color is black.

67) The Choroid is filled with blood vessels that bring oxygen and nourishment (غذاء) to the eye.

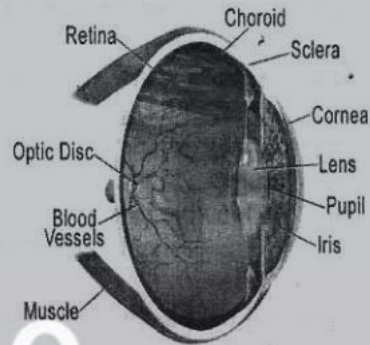
68) Vascular layer of the eye is called choroid.

69) **Retina:** Inner most covering of the eye is called retina.

70) Image formed in eye at the retina.

71) When light come from the external object then it passed through retina.

72) Behind the retina are optic nerves which take the signals to the brain and helps us to see object.

**EAR**

73) Ear consists of three parts. (a) Outer ear (b) Middle ear (c) Inner ear

74) Outer ear consists of pinna and a canal (قناة).

75) Where canal is end the ear drum is start.

76) The middle ear consists of three small bones called ossicles.

77) The inner ear consists of three semicircular canals and a coiled structure called cochlea.

78) Ear bones are the smallest bones of the body.

79) The inner ear also helps in maintaining the balance of the body.

SKIN

80) Skin is the largest sense organ of our body.

81) The most sensitive area of our body is your hands, lips, face, neck, tongue, and feet.

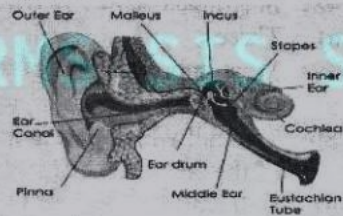
82) Skin has two main layers.

83) **Epidermis:** It is the outer layer of the skin and contains three layers of cells.

84) **Dermis:** It is the lower layer of the skin which contains sweat and oil glands, blood vessels, fat, and sensory cells called receptors.

85) If your nose is at its best you can feel the difference between 4000 to 10000 smells.

86) There are about 100 touch receptors in each of your fingertips.



NOSE

87) Nose open outside through nostrils (نُزْرَة).

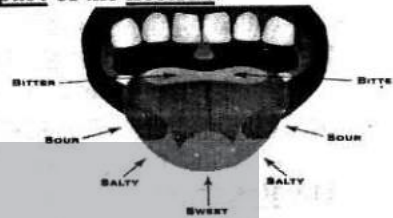
88) Special cells called receptors are located in the upper part of the nostrils.

TONGUE

89) Tongue has groups of sensory cell called taste buds.

90) Tongue test of bitter (بُرِّق) in his last parts, salty

sour (سُور) and sweet (سُور) in front of tongue similarly
sour (سُور) in sides of tongue.



91) We have almost 10000 taste insides our mouth even on the roofs of our mouth.

Exercise

- 92) We can sense different stimuli due to
- a) Sense organs b) Blood c) Environment d) Nutrition
- 93) In the eye, sensory cells are located on.....
- a) Choroid b) Sclera c) Iris d) Retina
- 94) The optic nerves behind the retina take signals to the.....
- a) Arm b) Brain c) Ear d) Nose
- 95) Hearing is helped by.....
- a) Optic nerve b) Auditory nerve c) Sensory nerve
- 96) Which organ is used for tasting.....
- a) Nose b) Ear c) Tongue d) Eye
- 97) The.....are the most complex sense organ of the body.
- a) Eyes b) Skin c) Nose d) Ears
- 98) Which of the following is known as the "window of the brain"?
- a) Sensory organ b) Eyes c) Ears d)None of these
- 99) Smallest cells present in human body are.....
- a) Red blood b) Sperm cell c) Egg-cell d) Nerve
- 100) What is Sclera?
- a) White part of eye b) Black part of eye c) Cornea d)None of these
- 101) What is the part of eye which is involved in focusing light on the retina?
- a) Iris b) Ciliary Muscles c) Sclera d) Cornea
- 102) Conversion of vibrations into compressed wave takes place in which part of human ear?
- a) Outer ear b) Middle ear c) Exterior ear d) Inner ear
- 103) Name the tiny bones of the middle ear, which convert sound into vibration?
- a) Stapes b) Malleus c) Incus d) Anvil
- 104) Iris is found in which layer of the eyeball?
- a) Retina b) Vascular tunic c) Fibrous tunic d)None of these
- 105) Name the part of eye which produce aqueous fluid that fills the front part of the eye
- a) Cornea b) Vitreous humor c) Ciliary body d) Uvea

Photosynthesis **ضیائی تالیف** and Respiration **عمل تنفس** in Plants

Unit No: 3

106) The sunlight is converted in to chemical energy or food by the plants. The process is called **photosynthesis**.

107) "**Photo**" means **light** and "**Synthesis**" means **preparation**.

108) All the living things get energy from the food through a process called **respiration**.

109) **Photosynthesis process**

Carbon dioxide + water ----- sunlight -----> Glucose + oxygen

110) **Respiration** is the process in which food (glucose) is broken down to release energy.

Glucose + Oxygen ----- Carbon dioxide + water + energy

Internal Structure of Leaf:

111) Leaf outermost layer on both sides is made up of cell which are tightly packed these are called **epidermal cell**.

112) The **lower epidermis** has some small pores called **stomata** which help in the exchange of gases.

113) **Mesophyll** is the tissue which lies between the upper and lower epidermis. it contain photosynthetic green pigment called chlorophyll.

114) **Phloem** is responsible for the transport of **food** in the plants.

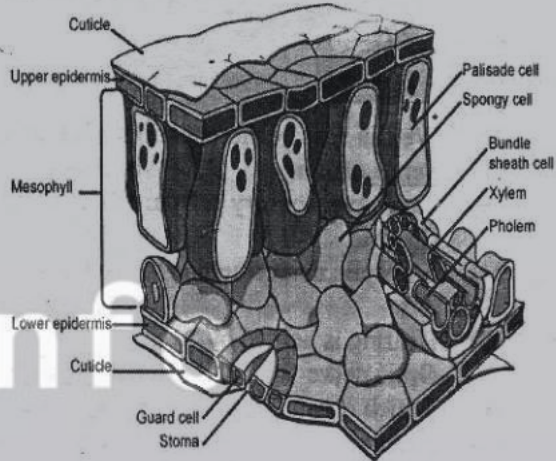
115) **Xylem** transports **water and salts** from the roots to upper parts of the plants.

116) **Five factor** is necessary for photosynthesis (light, carbon dioxide, temperature, chlorophyll, water)

117) **Suitable temperature** ranging for photosynthesis is **25°C to 35°C**.

118) **Water** combines with **carbon dioxide** to formed **glucose (food)**.

119) **Respiration** is the opposite of **photosynthesis**.



Exercise

120) Plants make their own food through a process called

a) Respiration **b) Photosynthesis** c) Fertilization d) Pollination

121) Which of these is not needed in the process of photosynthesis?

a) Sun light b) Carbon dioxide c) Chlorophyll **d) Oxygen**

122) The small pores or opening in leaves that take in the carbon dioxide are called.

a) **Stomata** b) Lamina c) Phloem d) Petiole

123) The suitable range of temperature for photosynthesis is.....

a) 5°C to 15°C b) 15°C to 45°C **c) 25°C to 35°C** d) 10°C to 25°C

124) What is given off by the plant during photosynthesis that animals need?

a) **Oxygen** b) Carbon dioxide c) Chlorophyll d) Water vapours

125) Light is absorbed by some substance; these substances are known as

- a) **Pigment** b) Surface c) Vein d) Salk
- 126) Photosynthesis increases concentration of oxygen in air, which is necessary for all.
- a) **Living organism** b) Fossils c) Birds d) Animals
- 127) Tissues present in leaf under upper epidermis and above lower epidermis known as
- a) Stoma b) Stalk **c) Mesophyll** d) Vein
- 128) Process of photosynthesis increases when light gets.....
- a) Dim **b) Brighter** c) Off d) None of them
- 129) Glucose and oxygen combine to form carbon dioxide and water plus.....
- a) Oxygen **b) Energy** c) Neon d) Nitrous oxide
- 130) Rate of photosynthesis is affected when temperature is to.....
- a) Hot b) Mild c) Cold **d) Hot or Cold**
- 131) In photosynthesis sugar is made by using
- a) Energy **b) Carbon dioxide** c) Oxygen d) Sun light
- 132) Color of pigment in chloroplast is
- a) **Green** b) Black c) Yellow d) Red
- 133) All animals need oxygen and most of this oxygen comes from.....
- a) Root **b) Plants** c) Stem d) Pollen grain
- 134) Respiration takes place in
- a) Day b) Night **c) Day and Night** d) None of them
- 135) Plants are known as purifiers of air due to process of.....
- a) Desiccation b) **Photosynthesis** c) Respiration d) Transpiration

Environment (ماحول) and interaction (تباہمی عمل)

Unit No: 4

- 136) **5th June** is celebrated as a world **environment day**.
- 137) Component of environment is **two** (a) Biotic component (b) A biotic component
- 138) The **living things** are called the **biotic components**.
- 139) The **non-living** things are called **abiotic components**.
- 140) **Biotic (living) component:**
- a) Producer (پیدا کرنے والا)
- b) Herbivores (چارہ خور)
- c) Carnivores (گوشت خور)
- d) Omnivores (ہمہ خور)
- e) Decomposer (گمانے والا)
- 141) **A biotic (non-living) components:**
- a) Sun light
- b) Temperature
- c) Rainfall
- d) Water
- e) Soil

- 142) The plants are the producers. The animals are consumers (مصروف کنندہ).
- 143) There are two types of environment
- a) (Terrestrial (خاکی)): Example: grass land, forest, deserts, lands)
- b) (Aquatic (آبی)): Example: pond (جھڑ), river, marine)
- 144) Decomposition rate of land is fast from deserts.
- 145) Annual rainfall is less than 250mm is the world everywhere deserts.
- 146) The soil is rich in decomposed material and the rate of decomposition is fast.
- 147) The rate of decomposition of plants and animals is low in deserts.
- 148) Predation (شکاری خور): It is the relationship between two animals in which one kills and feeds on the other. Like cat----Rat, Sparrow----insect etc.
- 149) Parasitism: One organism (parasite ... مفت خور) feed on another organism (the host) by living on or in its body. Like Mosquitos----Human
- 150) Mutualism: It is the relationship between two organisms in which both are benefitted and none of them is harmed. Some type of bacteria lives in the intestine of human being.

Exercise

- 151) Identify the abiotic component in the following.....
- a) Lion b) Apple c) Water vapor d) Beetle
- 152) The relationship between two organisms where both are benefited neither is harmed is called
- a) Predation b) Parasitism c) Mutualism d) none of these
- 153) Thar is an example of Environment.
- a) Desert b) Aquatic c) Grassland d) none of these
- 154) Mosquito feeding on human blood is an example of.....
- a) Predation b) Parasitism c) Mutualism d) none of these
- 155) Lichens are a mutualism formed between fungi and various groups of....
- a) Amoeba b) Lichens c) Fungi d) Algae
- 156) Depending on soil properties, more or less nutrients or water become available to
- a) Tree b) Land c) Air d) Mountains
- 157) Parasite that mostly feed themselves by sucking blood is known as.....
- a) Hot b) Ectoparasite c) Camouflage d) Fungus
- 158) Natural home of an organism is known as.....
- a) House b) Habitat c) Place d) Pond
- 159) Any non-living things is known as
- a) Autotrophy b) Biotic c) Abiotic d) none of these
- 160) Vegetation is more rare in deserts than in.....
- a) Mountain b) Tropical rainforest c) Plains d) Deserts
- 161) Organisms of same species living in a same habitat are known as.....
- a) Population b) Community c) Crowd d) Area
- 162) Animals that can get warm or cool according to their surrounding are known as
- a) Herbivores b) Carnivores c) Cold-blooded d) Warm blooded

Atoms, Molecules, Mixture, and Compound

Unit No: 5

- 163) **Atom** may or may not exist in Free State.
- 164) **Molecules** exist in Free State.
- 165) **Molecule** is a combination of two or more like and unlike atoms.
- 166) **Element** is the pure form of the matter.
- 167) **Element** is composed of only one kind of atoms.
- 168) **Total elements are 118. 92** are found in nature while the remaining elements are manmade.
- 169) **Hydrogen** is used for **filling of weather balloons**.
- 170) **Sodium** is used in **sodium lamp**.
- 171) **Magnesium powder** is used in the **flesh light**.
- 172) **Carbon (graphite)** is used in the manufacture of **lead pencil**.
- 173) **Phosphorous** is used in the **manufacture of matches**.
- 174) The **impure form of matter** is called **mixture**.
- 175) **Carbon dioxide** is **colorless gas** which makes up about **0.03%** of the air.
- 176) **Filtration, chromatography** are the techniques for **separation of mixtures**.
- 177) Out of 118 elements, **20 elements** are classified as **non-metals**.
- 178) Hydrogen, helium, nitrogen and oxygen are **gases**.
- 179) **Bromine** is a **liquid**.
- 180) **Compound** is a substance, which is formed by the chemical combination of two or more different elements in fixed ratio.
- 181) **Filtration**: It is used to separate insoluble particles from liquid by filter paper.
- 182) During filtration process the clear liquid is called **Filtrate**.
- 183) During filtration process all those particles left behind the filter paper is called **residue**.
- 184) **Sublimation**: It is a process in which some solid substances, when heated, change directly to the gases state without passing through the liquid state.
- 185) **Example of sublimation** substances are **Iodine, Ammonium Chloride** and **Nephthalene** etc.
- 186) The process of evaporation (عمل تبخیر) followed by condensation (عمل تكثیف) is called **distillation** (تنظیم یعنی قطرہ قطرہ پکانے کا عمل).
- 187) **Chromatography** is a modern technique used for the separation of mixture.

Exercise

- 188) The symbol used for sodium is.....
- a) S b) Sd c) **Na** d) N
- 189) Which of these is not a mixture.....
- a) Water b) air c) Tea d) **Alloy**
- 190) - Which method is usually used to separate colored substances from each other?
- a) Distillation b) Evaporation c) **Chromatography** d) Crystallization
- 191) Remaining solid on filter paper is known as.....

- a) Solution b) Stone c) Particles **d) Residue**
- 192) Letter used to identify an element in periodic table is known as.....
- a) Formula b) Idea **c) Symbol** d) Hint
- 193) Iron, cobalt and metals which are.....
- a) Non-magnetic **b) Magnetic** c) insulator d) none of them
- 194) Sublimation is a technique that helps chemists to.....
- a) Break b) Melt **c) Purify** d) Freeze
- 195) A coffee filter is used to separate coffee liquid from ground; this is a suitable for
- a) Sublimation b) Distillation **c) Filtration** d) Evaporation
- 196) Copper is mostly used in.....
- a) Roofing b) Construction **c) Electric equipment** d) Plumbing
- 197) Simple chromatography is carried out on
- a) Napkin b) Book c) Tissue Paper **d) Paper**
- 198) Non-metals are dull in appearance, this is why they do not reflect.....
- a) **Light** b) Rays c) Electricity d) Heat
- 199) Air is mixture of
- a) Solution b) **Gases** c) Compound d) Mixture
- 200) A technique in which two liquids are separated by heating process is known as
- a) Sublimation **b) Distillation** c) Filtration d) Evaporation
- 201) Substance that has physical properties opposite to those of metals is known as
- a) Dull b) Transparent **c) Non-metal** d) metal

Air

Unit No: 6

- 202) Air is necessary for **breathing** and **burning**.
- 203) Air is necessary for **respiration**.
- 204) Air is a **mixture** of many colorless gasses.
- 205) The surface of earth is surrounded by a thick layer of air (Gases), which reaches a **height** about **400km**.
- 206) Air consists of **78% nitrogen**, **21% oxygen**, **0.03% carbon dioxide** and 1% other gasses.
- 207) Nitrogen is **colorless** and **odorless gas**.
- 208) It is **used** in normal growth and **development of plants**.
- 209) Liquid nitrogen is used as a **coolant**.
- 210) Animals use Nitrogen in the form of **proteins**.
- 211) Plants use Nitrogen in the form of **nitrates** (Fertilizer).
- 212) Oxygen is **colorless** and **odorless gas**.
- 213) Liquid oxygen is used as **fuel in space ship**.
- 214) Oxyacetylene flame is used in **cutting and welding** of metals.
- 215) Oxygen is essential for **breathing**.
- 216) Carbon dioxide gas is heavier than air and fairly **soluble in water**.
- 217) Carbon dioxide is used in **fire extinguishers**.
- 218) Gaseous carbon dioxide upon cooling (to **-78.5°C**) directly becomes a solid and is known as **dry ice**.
- 219) Carbon dioxide also used to **prepare urea fertilizers**.

- 220) **Noble gases** are inactive, so they are also called **inert gases**.
221) **Argon** is used for filling the **electric bulbs**.
222) **Helium and hydrogen** gases are used for **filling balloons**.
223) **Neon signs** are used for **advertising boards**.

Exercise

- 224) Which of these gases are present in maximum amount in air.....
a) Oxygen **b) Nitrogen** c) Chlorine d) Carbon dioxide
- 225) Oxygen is not necessary for?
a) Combustion b) rusting c) Respiration **d) Photosynthesis**
- 226) Carbon dioxide is used in?
a) Soft Drink b) Fire extinguishers c) Photosynthesis **d) all of them**
- 227) A greenhouse gas that absorbs energy and maintains earth temperature is.
a) **Carbon dioxide** b) Oxygen c) Nitrogen d) argon
- 228) Main constituent in air is
a) **Nitrogen** b) Oxygen c) argon d) Water vapor
- 229) On cooling, a liquid will be changed in to
a) Dense **b) Solid** c) Liquid d) Semi-solid
- 230) Combustion cannot take place without.....
a) Water b) carbon **c) air** d) Zinc
- 231) Breathing is a process that refers to inhaling and exhaling of.....
a) Gas b) Molecule c) Proton **d) air**
- 232) **Process** of burning under presence of oxygen is known as
a) **Combustion** b) reaction c) Respiration d) Production
- 233) In desert areas, water vapor content is.....
a) Different b) Higher **c) Low** d) Constant
- 234) When a gas is cooled or compressed it becomes a
a) Solid **b) Liquid** c) Gas d) Semi-solid
- 235) Most abundant element is oxygen within the.....
a) **Earth crust** b) Moon c) Mars d) None of them
- 236) Major use of nitrogen is production of
a) Acid **b) Ammonia** c) Nitrate d) sulphate
- 237) Exhaled air contains 16% oxygen and about 4% of carbon dioxide, rest of 80% is
a) Neon b) Argon **c) Nitrogen** d) None of them
- 238) Other than nitrogen and oxygen, composition of rest of gases is about.....
a) 4% b) 3% c) 2% **d) 1%**
- 239) As temperature of air increases, there is an increase in capacity of
a) Mineral b) **Water vapor** c) Molecules d) Atom
- 240) Water vapor is less dense than
a) Temperature b) **air** c) Dust d) Space
- 241) Moisture capacity of air is called
a) Vapors b) **Humidity** c) Moist d) Wet air
- 242) Fish exchange oxygen and carbon dioxide through gills in.....
a) Liquid b) material **c) Water** d) Solution

Solution (محلول) and Suspension (معلق)

Unit No: 7

- 243) When something not solvable in liquid (water + soil) the mixture is called **heterogeneous mixture**.
- 244) When something solvable in liquid (water + salt) the mixture is called **homogeneous mixture**.
- 245) When we something solve in water, for example salt solve in water. The solvable thing is called **Solute (مستحل)** and water is called **solvent (محل)**. And the mixture of both is called **solution (محلول)**.
- 246) The solution in which water is taken as solvent is known as **aqueous solution**.
- 247) **Aqua** is a Latin words meaning **water**.
- 248) The solution in which solvent is something **other than water** is called **non aqueous solution**.
- 249) **70%** of human body is made up of **water**.
- 250) **Water** also is called **universal solvent**.
- 251) The solution that contain maximum amount of **dissolved solute** is described as a saturated **solution (سیر شده)**.
- 252) The solution that contains less solute and can still accommodate some more under the same condition is known as **unsaturated solution (غیر سیر شده)**.
- 253) **Dilute solution** are those solution, which contain **small amount** of **dissolved solute** in the solution.
- 254) **Concentrated solutions** are those solutions which contain **large amount** of **dissolved solute** in the solution.
- 255) As **temperature increase**, solubility's of gases **decrease**.

Exercise

- 256) Which of these are completely soluble in water?
 a) Sand b) Cooking oil c) Wax **d) Table salt**
- 257) A solution is made by dissolving some salt in a beaker of water. The salt is referred as.....
 a) **Solute** b) Filtrate c) Solution d) Solvent
- 258) Water insoluble substance is?
 a) Salt b) Sugar **c) Cooking oil** d) Milk
- 259) Aqueous solution is formed by dissolving a substance (solute)
 a) Alcohol **b) Water** c) Cooking oil d) Vinegar
- 260) When a solution is heated water evaporates and solute.....
 a) Evaporates too b) **Left as residue** c) Disappear d) Condense
- 261) Solvable solid cannot be separated from.....
 a) Solution b) Mixture **c) Both a and b** d) Heating
- 262) Solvable solid is separated from water by process of.....
 a) Heating b) **Evaporation** c) Condensation d) Reaction
- 263) A process which is used to separate insoluble solid from liquid in suspension is called

- a) Fermentation b) **filtration** c) Dissolving d) Reaction
- 264) Sand on beach is usually mixed with.....
- a) **Salts** b) Nutrients c) Clay d) Humus
- 265) Liquid which has been filtered and collected in conical flask is called.....
- a) Residue b) **Filtrate** c) Solvent d) Solute

Energy and its forms

Unit No: 8

- 266) **Energy** is the ability to do work.
- 267) Energy **exist many forms** like mechanical, sound, light, electrical, chemical, heat, nuclear, solar.
- 268) Energy possessed by a body **due to its position** is known as **potential energy**.
- 269) The energy possessed by a body because of **motion** is called **kinetic energy**.
- 270) **Heat** is a form of **kinetic energy**.
- 271) **Light** is the form of **kinetic energy**.
- 272) The **main source** of **energy** is **sun**.
- 273) **Sound** is a form of **energy**.
- 274) **Light** can travel in vacuum with a speed of about $3 \times 10^8 \text{ ms}^{-1}$.
- 275) Our ears can detect sound in the frequency range of **20Hz to 20000Hz**.
- 276) **Sound** can travel through solid, liquid, and gases, but it **cannot travel through vacuum**.
- 277) The **loss of energy** in any system is called **dissipation** of energy.
- 278) **Renewable energy** is energy generated from **natural resources** sunlight, wind, rain
- 279) **Non-renewable** energy resource like oil, natural gases, and coal.
- 280) Age group and **daily energy** need
- a) (1-3 years1200 k cal) b) (4-6 years.....1600 k cal)
- c) (7-10 years.....2000 k cal) d) (11-12 years..... 2500 k cal)

Exercise

- 281) The main source of energy is
- a) **Sun** b) Water c) Wind d) Magnet
- 282) A moving car hasenergy.
- a) **Kinetic** b) Potential c) Tidal d) Solar
- 283) Which one is not a form of energy
- a) Heat b) Light c) Sound d) **Lamp**
- 284) In a battery chemical energy is changed into.....
- a) Heat b) Sound c) Light d) **Electrical**
- 285) A moving car possess.....
- a) Sound energy b) **Mechanical energy** c) Heat energy d) Chemical E
- 286) Vibrating diaphragm of drum in the form of.....
- a) **Sound energy** b) Mechanical energy c) Heat energy d) Chemical E
- 287) Energy release in the form of nuclear radiations ion in addition to heat and light during nuclear reactions is known as.....
- a) Chemical energy b) Nuclear energy c) **Heat energy** d) Electrical E

Force and Machines

Unit No: 9

- 288) A **machine** is a device that helps to make **work easier**.
- 289) There are **seven types** of simple machines. (Lever, Pulley, Inclined plane, wheel and axle, screw, wedge)
- 290) There are **three types of pulley**, fixed pulley and movable pulley and compound pulley.
- 291) The speed of the driven shaft depends on the **number of teeth in each gear**.
- 292) When one gear drives another gear, both the gears revolve in the opposite direction. If it is needed to turn both the gear in the same directions, a third gears called "**idler gear**".

Exercise

- 293)gear is used to turn both the gears in the same direction.
 a) **Idler gear** b) Driving gear c) Driven gear
- 294) Pulley is simple machine used tothe objects.
 a) Move b) **Lift** c) Rotate
- 295) A flag pulley is an example of.....
 a) **Fixed pulley** b) Movable pulley c) Wheel-axle
- 296) A movable pulley can lift greater load by applyingeffort.
 a) Equal b) **Less** c) Moveable pulley
- 297) A is a push or a pull.
 a) Simple machine b) Pulley c) **Friction**
- 298) Simple machines make work easier by tradingfor force.
 a) Friction b) Work c) **Distance**
- 299) A wheel barrow is an example of a _____ class lever.
 a) Fourth b) **First** c) Second
- 300) Which is an example of a wheel and axle that makes work easier by reducing friction?
 a) **Screwdriver** b) Pencil sharpener c) Ladder
- 301) Which part of the lever supplies the force to move something?
 a) Fulcrum b) Load c) **Effort**
- 302) Which simple machine does a flagpole make use of?
 a) Lever b) Inclined plane c) **Pulley**
- 303) Which simple machine makes up a pencil sharpener? (the one mounted on the wall)
 a) **Wheel and axle** b) Lawn tractor c) Inclined plane
- 304) A hand drill consists of two mutually perpendicular
 a) **Gear** b) Pulleys c) Wheels
- 305) What should you do to reduce the amount of effort needed to lift something using a first class lever?
 a) move the fulcrum closer to the effort
 b) move the fulcrum to the middle of the lever
 c) **move the fulcrum closer to the load**

Properties of Light

Unit No: 10

- 306) **Light** travels at a **speed of 3×10^8 m/sec.**
- 307) Light energy travels in **straight line** which called **rays.** And
- 308) The collection of rays is called **beam.**
- 309) **Opaque:** If you **cannot see** through an object then the object is opaque because opaque materials do not allow light to pass through them.
- 310) **Translucent:** We **cannot clearly see** through the object then the object is translucent objects. Example book, wood, plastic paper.
- 311) **Transparent object:** The object through which **we can see** clearly. Example: air, glass, water.
- 312) Color is the visual effect that is caused by the spectral composition of the light emitted, transmitted, or reflected by objects.
- 313) There are **two laws of reflection (الانكاس).**
- 314) **First law of light:** The incident rays the reflected ray and the normal to the surface all lie in the same plane.
- 315) **Second law of light:** The angle of incidence rays is equal to the angle of reflection.
- 316) The **law of reflection** was first described by Muslim scientist **ibn-ul-haithem.**
- 317) There are **two** types of **reflection.**
- 318) **Regular Reflection:** When parallel rays of light strike smooth and shining surface than most of rays reflected with the same angle as that of **angle of incidence.**
- 319) **Diffused reflection (منتشر عكاس):** When parallel rays of light strike rough and irregular surface then the reflected rays are scattered (بکھرتا) in different direction.
- 320) **Luminous object (برائے اشیاء):** Luminous objects give light of their own. Example Sun, bulb, candle.
- 321) **Non luminous object (غیر برائے اشیاء):** Non luminous objects can only be seen when light is reflected from them. Example Moon, Earth etc.
- 322) A **pinhole camera** is a device that works on the **principle that light travels in straight line.**
- 323) A **Muslim scientist Al-Haithem** invented the **pinhole camera.**
- 324) A **small pinhole** will give a **sharp image** while a **large pinhole** will give a **blurred image.**
- 325) A **Periscope** is a device which is used to **watch an object on other side of the barrier.**
- 326) A simple periscope can be constructed by using **two plane mirrors** at **45° .**
- 327) A **Telescope** is an instrument with help of which you can see **distant object clearly.**
- 328) A **reflecting telescope** has a **concave mirror** and a **plane mirror.**
- 329) A **Microscope** is an instrument used to produce a **large image of an object.**
- 330) **Kaleidoscope** is an instrument or toy containing mirrors which make **multiple reflections.**

- 331) A **kaleidoscope** consists of a hollow tube containing **two or more rectangular plane mirrors** inclined to each other at certain angles.
- 332) Image depend upon the **two mirrors**, if
- The angle between the mirrors is 120° , **two images** of the objects are formed.
 - If the angles 90° , then **three images** of the object are formed.
 - If the angle is 60° then **four images** of the object are formed.
- 333) The first kaleidoscope came in to being in **1851**, by **Sir Davide Brewster** who belonged to **Scotland**.
- 334) **Plane mirror**: It is a mirror which is **flat in shape** and reflects the light with the **same angle** as that of the angle of **incident**.
- 335) Image form by the plane mirror is **literally inverts**, **virtual** and of **same size**.
- 336) **Curved mirror**: two types of curved mirror,
- 337) a) **Concave mirror** (مقعر آئینہ): The spherical mirror whose shining surface **curves inwards**.
- 338) **Concaves mirrors** are used by **doctors** to examine ears, nose, throat, and eyes.
- 339) **Concave mirrors** are used in **car head-lights**, **search light** and also in **Operation room**.
- 340) b) **Convex mirror** (کروی آئینہ): The spherical mirror whose shining surface **curves outward**.
- 341) When rays of light parallel to the principle axis fall on a convex mirror they **diverge** after reflection.
- 342) **Convex Mirror** also called **diverging mirror**.
- 343) **Convex mirror** (کروی آئینہ) are used in **vehicles** and also used in **dangerous road** for safe drive.

Exercise

- 344) Large image formed by convex mirror is always
- Virtual**
 - Erect and large
 - Real
- 345) Inverted Concave mirror has the capability to..... a parallel beam of light.
- Converge**
 - Diverge
 - Dispense
 - No change
- 346) A microscope is an instrument used to produce aimage.
- Large**
 - Small
 - Short
 - Far
- 347) Which one is not a rough surface
- Paper
 - Wall
 - Cloth
 - Mirror**
- 348) Mirror used in car head light and search lights are
- Convex
 - Concave**
 - Plane
 - All of these
- 349) Mirror used vehicles are
- Convex**
 - Concave
 - Plane
 - All of these
- 350) Sun is good Example of.....
- Luminous object**
 - Non-Luminous
 - Transparent
 - Opaque
- 351) Normal, incident ray and reflective ray lies at a same point in.....
- Reflection and refraction both**
 - Reflection
 - Refraction

Investigating Sound

Unit No: 11

- 352) **Sound** is a form of **energy**.
- 353) Sound travels as **longitudinal waves**.
- 354) **Three things** are necessary for **hearing sound**.
- a) Sound producing body
- b) Medium for traveling of sound
- c) Receiving device
- 355) Longitudinal waves comprise of **compression** and **rarefaction**.
- 356) **Human can hear** in frequency range between **20Hz to 20,000Hz**.
- 357) Sound can travel through solids, liquids and gases.
- 358) **Sound cannot pass** through **vacuum**.
- 359) The **speed** of sound in **air** at **0°C** is **332 m/s**.
- 360) If the **temperature is increase**, the **speed of sound increases**.
- 361) The speed of sound at **20°C** is **340m/s**.
- 362) The **speed** of sound in **water** is **1525 m/s**.
- 363) The speed of sound in **iron** is **5130 m/s**.
- 364) Back and forth movement of an object is called **vibration**.

Exercise

- 365) Sound cannot travel through.....
- a) Iron b) Wood c) Water d) **Vacuum**
- 366) Human ear has.....distinct parts.
- a) Four b) Two c) One d) **Three**
- b) Sound propagates maximum in.....
- a) Gas b) Liquid c) **Solid** d) All
- 367) Speed of soundin air with increase is temperature.
- a) **Increase** b) Decrease c) Remain same d) Both b and c
- 368) Sound is kind of.....
- a) Work b) **Energy** c) Force d) None
- 369) Sound is produced due to.....
- a) Friction b) Refraction c) **Vibration** d) Circulation
- 370) Sound is slowest in.....
- a) Liquid b) Solid c) Vacuum d) **Air**
- 371) Sound passes from one place to another place in form of.....
- a) Ray b) **Waves** c) Energy d) Light
- 372) The pitch of sound depends on.....
- a) **Frequency** b) Amplitude c) Both of these d) None of these
- 373) Eardrum is a part of.....
- a) Sound producing organ b) Sketal System
- c) **Hearing organ** d) Reproductive organ
- 374) The sound is a form of energy which travels through any medium as.
- a) **Longitudinal waves** b) Transverse waves
- c) Only rarefaction d) Only compression

Space and Satellites

Unit No: 12

- 375) Objects in space, such as planets, moons, asteroids and stars are called **celestial bodies** or **heavenly bodies**.
- 376) **Satellite** is an object that **revolves** around the **planet**.
- 377) There are **two types** of **satellites**,
- ✓ **Natural satellites:** A celestial body that revolves around a planet is known as natural satellite. Like **Earth's moon**.
- ✓ **Artificial satellites:** An object launched into orbit by human beings is called an artificial satellite.
- 378) The **first artificial satellite** was launched in **1957**.
- 379) **Asteroids** are small rocky bodies that are members of solar system.
- 380) **Asteroids** move in elliptical orbits between Mars and Jupiter.
- 381) There are about **100,000 asteroids**; only **two** named **Ceres and Vesta** can be seen from the earth without telescope.
- 382) **Ceres** is the **largest asteroid** ever discovered. Its diameter is about **933km**.
- 383) **Comet** (ذم در تار) is relatively small, icy celestial body revolving around the **Sun**. It has **luminous tail**.
- 384) A Comet has **three parts**; head, coma and tail.
- ✓ The **head** is formed of ice, particles of rocks and gases.
- ✓ When the comet becomes close to the Sun and heats up, then gases are released and make a cloud around it called **coma**.
- ✓ When Comets near the Sun a **long tail** of gases and dust particles is formed.
- 385) **Meteors** (شهاب ثاقب) are small solid bodies that enter a planet's atmosphere; it burns due to friction produced by its rapid motion.
- 386) Meteors entering our atmosphere burn up **50 to 100 km** above the surface of the earth.
- 387) Some meteors are very large and sometime strike on the surface of the earth; they are called **meteorites**.
- 388) **Sputnik** is an artificial satellite launched by the **Soviet Union** from **1957 to 1961**. The goals of the sputnik program included studying the earth's upper atmosphere.
- 389) **Geostationary Satellites** are **communication satellites** using geostationary orbit.
- 390) **Pakistan** has launched its first geostationary satellite, **pak sat-IR** in **2011**.
- 391) **Landsat satellite 1** launched **United States** in **1972**. It's used for **land mapping**.
- 392) **Polar satellite** revolves around the earth over the both north and south poles. They **provide weather information** and also **map ozone levels**.
- 393) **Global Positioning System (GPS)** is a group of **24 satellites** that transmit signals to and from all parts of the world. The system enables a GPS receiving person to determine its **location, speed, direction and time**.
- 394) **Navigational satellites** pinpoint the **location of objects** on earth.
- 395) **Surveillance satellites** are used to **monitor military activities**.
- 396) **Yuri Gagarin** was **first man** first orbits the earth.
- 397) **Valentine Tereshkova** **first woman in space**.

- 398) Neil Armstrong and Edwin Aldrin were the first Americans to step on the moon in 1969.
- 399) Over 300 communication satellites have been launched since 1957.
- 400) Pakistan sent the first Satellite Badr-I in 1990s.

Exercise

- 401) Over..... Communication satellites have been launched since 1957.
a) 100 b) 200 c) 300 d) 600
- 402)satellite is used for mapping land.
a) Sputnik b) Explorer c) Landsat d) Polar
- 403) Geostationary orbit is exactly above the.....
a) North Pole b) Equator c) South Pole d) None
- 404) Halley's Comet appears approximately everyyears.
a) 76 b) 600 c) 700 d) 67
- 405) The following is not NASA space shuttle.....
a) Discovery b) Endeavour c) Challenger d) Fortuner
- 406) The first human to travel into space.....
a) Alan Shepard b) Neil Armstrong c) Yuri Gagarin d) Vladimir
- 407) The observation of objects in space, known as.....
a) Astronomy b) Telescope c) Space Exploration d) Meteorology
- 408) First moon landing mission was launched.....
a) USA b) USSR c) China d) France
- 409) A GPS is composed of solar powered satellites which are in number.....
a) 10 b) 16 c) 21 d) 27
- 410) In 1996 the first space probe which landed on moon was.....
a) Luna 1 b) Luna 9 c) Sputnik 1 d) Terra 1
- 411) The first artificial satellite sent in space was.....
a) Sputnik 1 b) Sputnik 2 c) Explorer 1 d) Explorer 2
- 412) First space station.....
a) Apollo 1 b) Sputnik 1 c) Salvut 1 d) None of these

GENERAL SCIENCE

(جنرل سائنس)

Human Organ System

Unit No: 1

Digestive system:

- 1) The system which helps us to **take food**, **digest** and **absorb** it in the body to **gain energy** is called **digestive system**.

Oral cavity or Buccal Cavity or Mouth or Ingestion:

- 2) **Oral cavity** is lined by lips. It contains **teeth** and **tongue**.
 3) **Tongue** has **taste buds** for **test** and **texture**.
 4) **Salivary glands** also found in **mouth**.
 5) It also contains **enzyme ptlin**, which perform digestion of **carbohydrates**.

Oesophagus:

- 6) Foods enter the **oesophagus** which is a **long tube** that **open in to stomach**.

Stomach:

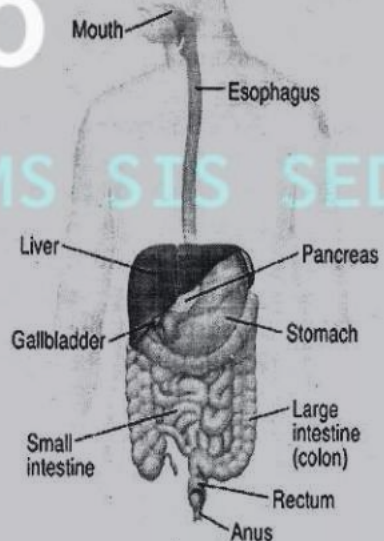
- 7) **Breaks down food** into a liquid mixture.
 8) It walls secrete **hydrochloric acid (HCl)** and **enzyme pepsin**.

Small Intestine: (Absorption),

- 9) It is a **long, narrow coiled tube**.
 10) Its **length** about **six to eight meters**.
 11) Its **first part** just after stomach is called **duodenum** which is about **30cm in length**.
 12) Digestive juice of small intestine is (**enzymes**) from **liver** and **pancreas** meet with semi digested food coming from the stomach.
 13) The **gallbladder** stores **bile**.
 14) The **Enzymes completely digest the food**.
 15) The **last part** of the small intestine is called **Villi**. **Villi absorb** the **nutrients (carbohydrates + protein + fates)** and allow them in to the blood.

Large Intestine:

- 16) **Last part** of the digestive system.
 17) **Undigested food is stored** here for some time.
 18) Remaining waste material is out from the body through **anus**.
 19) **Liver** and **pancreas** are **two glands** associative with digestive system.



- 20) Liver produce bile and pancreas secretes many enzymes.
- 21) Vitamin k is synthesized in the large intestine by useful bacteria.
- 22) Digestion is the process in which complex food components are mechanically and chemically broken down into its simple components.
- 23) When we food broken down by teeth and stomach this process is called mechanical or physical digestion.
- 24) When different chemicals like enzymes are mixed and reached to every cell of the body is called chemical digestion.
- 25) Salivary glands secretion... Ptyalin for *Break down starch into small sugar molecules*.
- 26) Stomach secretion.....HCL, pepsin for *break down protein into peptides*.
- 27) Liver secretion.....Bile for *digest fats*.
- 28) Pancreas secretion.....Pancreatic juice for *break down proteins, carbohydrates and fats*.

Respiratory System

- 29) Breathing is the process in which we inhale air through nose and take it in to lungs.
- 30) The process of taking the air or oxygen (O₂) is called Inhalation.
- 31) The process of removed of air (CO₂) is called Exhalation.
- 32) After the above process oxygen reaches to every cell of the body.

Nose:

- 33) The nose consists of two nostrils.
- 34) The mucus glands in the nostrils secretes mucus, which traps dust.

Larynx:

- 35) The larynx or sound box is located in the neck.
- 36) The air from the nose passes through the pharynx in to the trachea.

Trachea:

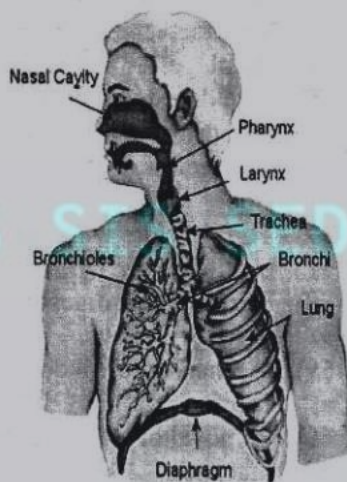
- 37) The trachea or wind pipe is supported by incomplete cartilaginous rings.
- 38) Trachea opens in lungs.

Bronchi:

- 39) The trachea divides in to two parts before lungs are called bronchi.
- 40) Each bronchus enters the lungs divide in to small bronchioles. This bronchioles open in the air sacs called alveoli.

Lungs:

- 41) Lungs consist of about seven hundred million alveoli.
- 42) Gases exchanges occurs b/w the air and the blood in the thin wall of alveoli.
- 43) A very thick muscular membrane, called diaphragm, separates the lungs from the abdominal cavity.
- 44) The chemical break down of food to release energy is called respiration.
- 45) The process of breathing oxygen absorb in to the blood reaches the cell. In the mitochondria of the cell oxygen is used to chemically break down (burn) the food.



- 46) **Pneumonia** is a series infection of bronchioles and alveoli. The bacteria are the common causes of Pneumonia.
- 47) **Tuberculosis (TB)** is caused by the bacterium mycobacterium tuberculosis, which commonly affect the lungs.
- 48) **Lung cancer:** Cancer is defined as an uncontrolled growth and division of cell. These cells gather and form tumors. Cell from the cancer can break away from the original tumor and spread to other parts of the body. This process is called metastasis.
- 49) 90% of lung cancers due to tobacco use.

Exercise

- 50) The organ which does not produce any digestive secretion is.....
- a) Liver b) Kidney c) Pancreas d) Stomach
- 51) Another name for the windpipe is.....
- a) Lungs b) Larynx c) Trachea d) Oesophagus
- 52) Arrange the following organs to describe the process of inhalation
- A. Nose B. Trachea C. Alveoli D. Lungs E. Bronchi
- a) A,B,C,D,E b) D,E,A,B,C c) C,D,A,E,B d) A,B,E,D,C
- 53) **In which part of the body digestion of protein begins?**
- a) Pancreas b) Stomach c) Small Intestine d) Large Intestine
- 54) It protects the lungs from outside harm.....
- a) Cartilage b) Diaphragm c) The rib cage d) Alveoli
- 55) The digested food is absorbed into the blood in the.....
- a) Mouth b) Small intestine c) Large intestine d) Stomach
- 56) The secretion of livers is called.....
- a) Bile b) Pancreatic juice c) saliva d) Gastric
- 57) The structure which separate chest cavity from the abdominal cavity is called.
- a) Cartilage b) Ribs c) Diaphragm d) All of them
- 58) Enzymes that digest fats are known as
- a) Lipase b) Trypsin c) Maltase d) Fates
- 59) Mechanical breakdown of food is due to.....
- a) Pepsin b) Hydrochloric acid c) Peristalsis d) Chewing
- 60) Removal of waste product from a body is known as
- a) Ingestion b) Egestion c) Digestion d) Absorption
- 61) Proteins are converted into.....
- a) Amino acids b) Glucose c) Fats d) Fibers
- 62) If we eat too much contaminated food, stomach forces us to.....
- a) Digest b) Egest c) Vomit d) Exercise
- 63) **Name the largest part of the Alimentary canal?**
- a) Large Intestine b) Small Intestine c) Liver d) Stomach
- 64) Process of absorption of food molecules from digestive track by blood vessels is called.....
- a) Absorption b) Assimilation c) Digestion d) Ingestion
- 65) **Complete digestion of food occurs in.....**
- a) Stomach b) Small Intestine c) Pancreas d) Large Intestine

- 66) Diarrhea takes place due to.....
- a) Biting by mosquitoes
b) Eating contaminated food
c) Using infected syringes
d) Cold
- 67) The mechanical breakdown of food occurs in the
- a) Mouth and stomach
b) Mouth and small intestine
c) Mouth
d) Stomach
- 68) Name the hardest material present in the body?
- a) Dentin
b) Pulp
c) Enamel
d) None of the above
- 69) If pancreas is removed, the compound which remains undigested is.....
- a) Proteins
b) Carbohydrates
c) Fats
d) all of these
- 70) Most of the fat digestion occurs in.....
- a) Rectum
b) Stomach
c) Duodenum
d) Small intestine
- 71) Name the process of gaseous exchange in the body.
- a) Lymphatic system
b) Respiration
c) Cardiovascular system
d) Respiratory system
- 72) Nose, larynx, pharynx, lungs, trachea, and bronchi are the parts of the.....
- a) Lymphatic system
b) Respiration
c) Cardiovascular system
d) Respiratory system
- 73) Due to the contraction of bronchi it is difficult to.....
- a) Inhale
b) Exhale
c) Breathe
d) Cough
- 74) What is the function of Bile Juice secreted by Liver?
- a) It makes the food alkaline
b) It makes the food acidic
c) It breaks down the food.
d) None of the above
- 75) Duodenum has characteristic Brunner's gland which secrete two hormones called.....
- a) Kinase, Estrogen
b) Secretin, Cholecystokinin
c) Prolactin, Parathromone
d) Estradiol, Progesterone
- 76) After food reaches the stomach.....
- a) No digestion occurs in the stomach
b) The food moves quickly into the small intestine
c) Juice mix with the food and stomach muscles squeeze it
d) The food is completely digested and is absorbed by tiny blood vessels in the walls of the stomach
- 77) Food travels through these organs in the following.....
- a) Mouth, oesophagus, stomach, small intestine, large intestine, anus
b) Mouth, oesophagus, stomach, large intestine, small intestine, anus
c) Mouth, stomach, oesophagus, small intestine, large intestine, anus
d) Mouth, oesophagus, stomach, large intestine, small intestine, anus

Transport in Human and Plants

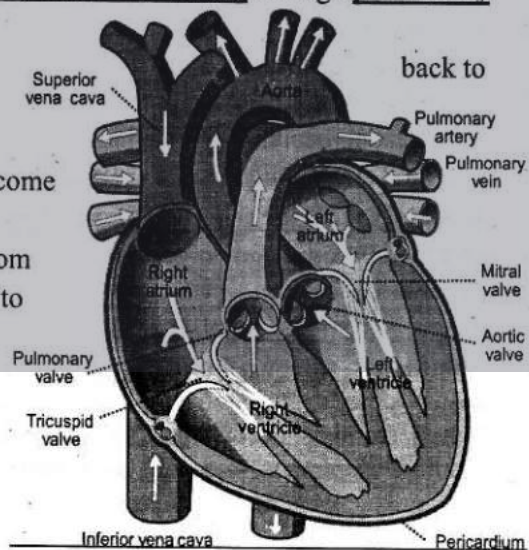
Unit No: 2

Human Transport System:

- 78) In human being transport system is composed of heart, arteries, veins, and the blood. This system is termed as Circulatory System.
- 79) Heart is covered by a tough double membrane called pericardium.
- 80) Heart is composed of cardiac muscles which keep on working day and night.
- 81) Heart consists of four chambers; two auricles and two ventricles.
- 82) The fluid part of the blood is called plasma.
- 83) Plasma has two types of cell. 1) Red blood cell 2) White blood cell
- 84) Red blood cell (RBC) contains a red pigment called hemoglobin.
- 85) Hemoglobin bind with oxygen and transport it to all the parts of the body and ultimately to the cell. The presence of hemoglobin makes blood appear red.
- 86) White blood cell (WBC) fight against germs that may enter our body.
- 87) Arteries: Blood distributed to different body parts by the heart.
- 88) The largest artery is known as the aorta.
- 89) Veins: Blood collected and transported back to the heart.
- 90) The largest vein is called vena cava.
- 91) The Human being have average 72 heart beats per minutes.

Working of Heart:

- 92) The right atrium receives the deoxygenated blood through superior vena cava from the whole body.
- 93) From the right atrium the blood is forced to right ventricle through tricuspid valve.
- 94) Right ventricle pumped the deoxygenated blood to the lung through pulmonary arteries.
- 95) After oxygenation the blood comes left atrium through four pulmonary veins.
- 96) After the left atrium oxygenated blood come into the left ventricle.
- 97) On contraction the oxygenated blood from left ventricle is pushed with full force in to aorta which distributes it to whole body.
- 98) Oxygenated blood is bright red in color.
- 99) Deoxygenated blood is bluish in color.



Transport in Plants

- 100) **Plants to possess a transport system** which is comprised of **roots, stem** and **leaves**. There is a network of conducting tissues which comprises of **xylem and phloem**.
- 101) **Algae** have no **need for transport** because it's all cell is directly absorbed mineral salts and oxygen from water.
- 102) The **first root** which grows from the radical of an embryo is called **primary root**.
- 103) The branches of primary roots are called **secondary roots**.
- 104) Those roots which grow from secondary roots are called **tertiary roots**.
- 105) **Plants** need **CO₂ gas** for **photosynthesis**.
- 106) **Plants** need **oxygen gas** for **respiration**.
- 107) **Phloem** worked of the **transportation** of **food** in the all cell of plants.
- 108) **Xylem** worked of the **transportation** of **water** in the all cell of plants.
- 109) Plants need oxygen to respire and CO₂ to prepare food. For this purpose the underside of leaves bear small openings called **stomata**.

Exercise

- 110) It is not the function of the human heart.....
- It keep beating throughout life
 - It collects the blob from veins
 - Exchange of gases takes place in it**
 - It pumps the oxygenated blood to the body
- 111) Speed of blood is faster when.....
- It enters the aorta**
 - It enter the kidneys
 - It reaches the capillaries
 - It reaches the auricles
- 112) If the valves of the heart of a person become defected how it can be diagnosed?
- By taking a X-Ray
 - By open heart surgery
 - By echocardiogram**
 - By simple ultrasound
- 113) Choose the correct order to describe the flow of oxygenated blood to the cells..
- A. Arteries B. capillaries C. Lungs D. Aorta E. Ventricle
- A,B,C,D,E
 - C,D,E,A,B
 - C,E,D,A,B**
 - A,C,D,B,E
- 114) The blood from the heart is transported to all parts of the body by the
- Arteries**
 - Veins
 - Capillaries
 - Villi
- 115) Transport of water from roots in plants takes place through.....
- Phloem
 - Xylem**
 - Epidermis
 - Stomata
- 116) The evaporation of water from leaves is called.....
- Photosynthesis
 - Respiration
 - Transpiration**
 - None
- 117) The largest artery is called
- Aorta**
 - Pulmonary artery
 - Atrium
 - Vertical

- 118) Synthesis of carbohydrates takes place in.....
 a) Root b) Stem c) Fruit **d) Leaves**
- 119) Vessel which takes blood from the heart to lungs is known as.....
 a) **Pulmonary artery** b) Pulmonary vein c) Renal vein d) None
- 120) Heart is also called.....
 a) **Muscular Pump** b) Pumping device c) Pumping machine
- 121) Oxygen is taken from.....
 a) Cells to lung b) Heart to lungs **c) Lungs to cell**
- 122) Beating of pulse is due to
 a) Energy **b) Flow of blood** c) flow of water d) Oxygen
- 123) Hemoglobin is the combination of
 a) Carbohydrates and fats b) Carbohydrates and proteins
 c) Fats and proteins **d) Proteins and iron**
- 124) A white blood cell is two times of a
 a) **Red blood cell** b) Platelet c) Tissue cell d) None
- 125) Plasma contains water along with important.....
 a) **Food chemicals** b) cells c) Tissues d) Bacteria

Reproduction in Plants

Unit No: 3

- 126) There are **two types** of **reproduction**: 1) Asexual reproduction 2) sexual reproduction
- 127) **Asexual reproduction in animals**: The type of reproduction in which male and female sex cells are not involved is **called asexual reproduction**. Small pieces from their bodies separate and grow in to new animals like **earthworm, sponges etc.**
- 128) **Asexual reproduction in plants**: It is a kind of reproduction in which only one parent is involved. In this kind of reproduction **no mixing** of **male and female gametes (sex cell)**.
- 129) Asexual reproduction **in plants** is also known as **vegetative reproduction** or **vegetative propagation**.
- 130) **a) Cutting**: **Cactus plants** bud cut from the main plants and fell down on the soil where they grow in to a new plant. Example **rose** and **jasmine** etc.
- 131) **b) Grafting**: In this method cutting s are grafted on other plants of same kind to **improve quality and quantity** of yield.
- 132) **c) Layering**: When the branch of some plants is buried in the soil they develop roots and finally a **new plant** is formed. And finally the branch goes under the soil **cut off** from the main plant which **grows independently**.

- 133) **Tuber:** Potato tubers have eyes or buds on it. When the tubers are grown, these eyes develop into new plant.



Layering



Grafting



Tuber

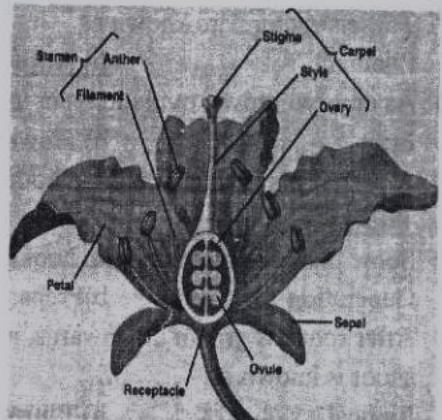


cutting

- 134) **Sexual Reproduction:** The type of reproduction in which sex cell are involved is called sexual reproduction. In this reproduction sex cells of male animals or plant reach the sex cell of the female.
- 135) The both cells together to make a new bigger cell called zygote.
- 136) The process of uniting male and female sex cells is called as fertilization.
- 137) Sex organ of a plant present in the flowers. Generally a flower contains both types of sex organ.
- 138) a) **Sepals (Calyx):** These are green leaf like parts which protect the inner parts in bud condition.
- 139) b) **Petals (Corolla):** These are brightly colored leaf which attracts the insects towards them.
- 140) c) **Stamen (Androecium):** This is the male sex organs of the flowers.
- 141) The lowest part stamen of this is called filament.
- 142) The upper box like structure of stamen is called anther. Another is filled with male sex cells is called pollen grains.
- 143) d) **Carpals (Gynoecium):** Generally a single carpel is present in the center of the flower.
- 144) **Carpal** is female sex organ of the flower. A typical consists of three parts Stigma, Style, and Ovary.
- 145) In Ovary female sex cell presented.

Pollination

- 146) The transfer of pollen grains from the anther to the stigma of the carpel is called pollination.
- 147) There are two types of pollination. 1) Self Pollination 2) Cross pollination
- 148) When pollens from the anther are transferred to the stigma of the same flower, the process is called self-pollination.
- 149) When the transfer of pollen grains from the anther to the stigma of a flower on another plant of the same species is called cross pollination.



Environment and Feeding Relationship

Unit No: 4

- 166) Everything which is present in the surrounding of a living organism is called its **environment**.
- 167) **Ecosystem** is the study of relationship of living organisms with their environment.
- 168) **Ecology** is the study of relationship of living organisms with their environment.
- 169) **Ecology** is also called as **environmental biology**.
- 170) **Ecosystem** is the basic **functional unit** of **environment**.
- 171) **Ecosystem** is the **basic unit** of **ecology**.
- 172) Ecosystem is always composed of **two** components. 1) Biotic component 2) Abiotic component
- 173) **Biotic component**: Those components which include all **living organisms** present in the **ecosystem** i.e. animals and plants.
- 174) **Abiotic component**: Those components which include all **nonliving** materials present in the **ecosystem** like water, soil, light, air, wind etc.
- 175) **Ecosystem** works by **constant exchange** of materials between its **biotic and abiotic components**.
- 176) **Biotic components** can be dividing in to **producers, consumer** and **decomposers**.
- 177) All the **green plants** are **producers**.
- 178) **Animals** are called **consumers**.
- 179) **Microorganisms** like **bacteria** and **fungi** are called **decomposers**.
- 180) Those **animals** which **directly feed on plants** are called **herbivores** (primary consumer). Example cow, goat, rabbit, deer, elephant, etc.
- 181) Those **animals** which eat **flesh of herbivores** are called **carnivores** (secondary consumer). Example lion, tiger, spider etc.
- 182) **Those animals** which feed on **secondary consumer** are called **omnivores** (tertiary consumers) Example sparrow, human being, bear etc.
- 183) In an ecosystem many animals and plants live together. The actual place where they live is called their **habitat**.
- 184) Those animals which active during **daylight** are called **Diurnal animals**.
- 185) Those animals which active during at **night** are called **Nocturnal animals**.
- 186) Sunlight is absorbed by **producers (plants)** and they make food for the whole ecosystem. Then this energy is transferred to **animals (consumers)** and finally **decomposer** releases this energy by decomposing the **dead organism**. This flow of **energy** is called **food cycle**.
- 187) The place of an organism in the **food chain** is called **trophic level**.
- 188) The **combination of many food chains** is called a **food web**.
- 189) **Tundra** is an **environment** that is very **cold and windy**.
- 190) Tundra environment is **treeless**.
- 191) **An adaptation** is a way through which an animal's body helps it to survive or live in its environment.
- 192) **Migration** is the movement of animals to far-away places.
- 193) **Hibernation** is a state of inactivity in animals during winter season.

Exercise

- 215) Percentage of water on earth surface is about
 a) 50% b) 60% **c) 70%** d) 80%
- 216) Pesticides and fertilizers are the source of.....
 a) Domestic waste **b) Agriculture waste** c) Industrial W d) Acid rain
- 217) Harmful bacteria are removed from water by passing
 a) Oxygen gas b) Nitrogen gas **c) Chlorine gas** d) CO₂
- 218) Suspended particles from drinking water are removed by.....
 a) Table salt b) **Potash alum** c) Charcoal d) Chlorine
- 219) Distillation is a technique of.....
 a) **Separation** b) Preparation c) Disinfection d) Filtration
- 220) The most abundant chemical present on the earth's surface is.....
 a) **Sodium** b) Chlorine c) Water d) Oxygen
- 221) The percentage of water in ocean is.....
 a) 70% b) 80% c) 90% **d) 97%**

Structure of an Atom

Unit No: 6

- 222) There are three sub-particles of atoms (Proton, Neutron, and Electron). These are also called fundamental particles.
- 223) The center of the atom is called 'Nucleus'.
- 224) Protons and neutrons is the part of nucleus.
- 225) Electron always in constant motion around the nucleus.
- 226) Electron has negative charge.
- 227) Proton has positive charge.
- 228) Neutron has no charge.
- 229) Electrons revolve around the nucleus in particular paths called orbits or shells.
- 230) Atom is neutral particle. (The number of proton just equal to the number of electron).
- 231) The number of protons in the nucleus or the no of electron of an atom is called the atomic number. Represented by 'Z'.
- 232) The total number of proton and neutron in nucleus is called Mass number. Represented by 'A'.

| Element | Symbol | A.No(Z) | M.No(A) | Element | Symbol | A.No(Z) | M.No(A) |
|-----------|--------|---------|---------|-------------|--------|---------|---------|
| Hydrogen | H | 1 | 1 | Sodium | Na | 11 | 23 |
| Helium | He | 2 | 4 | Magnesium | Mg | 12 | 24 |
| Lithium | Li | 3 | 7 | Aluminum | Al | 13 | 27 |
| Beryllium | Be | 4 | 9 | Silicon | Si | 14 | 28 |
| Boron | B | 5 | 11 | Phosphorous | P | 15 | 31 |
| Carbon | C | 6 | 12 | Sulphur | S | 16 | 32 |
| Nitrogen | N | 7 | 14 | Chlorine | Cl | 17 | 35 |
| Oxygen | O | 8 | 16 | Argon | Ar | 18 | 40 |
| Fluorine | F | 9 | 19 | | | | |

- 233) Atomic Number and Mass Number of First 18 elements.

- 234) The **formula** of electronic configuration is $2n^2$.
- 235) Shell or energy level represented by $K(1^{st})=2, L(2^{nd})=8, M(3^{rd})=18, N(4^{th})=32$
- 236) Atomic no and Mass no written method ${}_{11}\text{Na}^{23}, {}_6\text{C}^{12}$.
- 237) The electron in the **highest shell** is involved in **bonding** and they are called **valence electron**.
- 238) An **ion** is formed when an **atom loses** or **gains** an **electron** during a chemical reaction.
- 239) When an atom **loses electron** it form **positive ion**.
- 240) The Positive ion is called '**cation**'.
- 241) When an atom **gains electron** it forms a **negative ion**.
- 242) The negative ion is called '**anion**'.
- 243) Some element has **two or more different atoms**. These atoms have **same atomic number** but **different mass number** is called **isotopes**. (${}^1\text{H}_1, {}^2\text{H}_1, {}^3\text{H}_1$)

| Cation | Anion |
|------------------------------|--------------------------------|
| Na ⁺ (Sodium ion) | Cl ⁻ (Chloride ion) |
| K ⁺ (Potassium) | O ²⁻ (oxide ion) |
| Ca ²⁺ (Calcium) | F ⁻ (Fluoride ion) |

Exercise

- 244) These have the same number of protons in each atom but the neutron number can vary.....
- a) **Isotopes** b) Molecules c) Ions d) Isobars
- 245) The particle that carries a negative electrical charge
- a) Proton b) Neutron c) Nucleus **d) Electron**
- 246) An atom of carbon contains 6 protons and 6 neutrons, its mass number will be...
- a) **12** b) 6 c) 18 d) 24
- 247) The center or core of an atom is called.....
- a) Orbital **b) Nucleus** c) Proton d) Neutron
- 248) An element has seven electrons in its valance shell. Its vacancy is.....
- a) 7 b) 0 **c) 1** d) 8
- 249) Number of protons in a carbon atom is.....
- a) **6** b) 11 c) 12 d) 10
- 250) Number of protons and electrons in an atom is.....
- a) Different **b) Same** c) Average d) Constant
- 251) Positively charged particles of an atom are called.....
- a) **Protons** b) Neutrons c) Electrons d) Charges
- 252) Neutrons carry.....
- a) +ve charge b) -ve charge c) Neutral **d) no charge**
- 253) Size of single atom is.....
- a) 1nm **b) 0.1nm** c) 0.11nm d) 1.0nm
- 254) Total no of protons in atom of each element is called it's.....
- a) **Atomic number** b) Atomic mass c) Molecular mass

Physical and Chemical Changes and Processes

Unit No: 7

- 255) A **physical change** is the one during which the **chemical composition** of the matter **does not change**.
- 256) A **chemical change** is the one during which **entirely new different substances are formed**.
- 257) A chemical change is also called a **chemical reaction**.
- 258) Change or processes that **can be reversed** are called **reversible changes**. For example melting of ice, evaporation or freezing of water.
- 259) Change or processes that **cannot be reversed** are called **Irreversible changes**. For example when milk turn into curd, it cannot be changed back to milk.
- 260) **Hydrocarbon** is the **compounds of carbon and hydrogen** only. They are mainly used as **fuels**.
- 261) Natural gas, petrol, diesel, gasoline oil etc. are all **hydrocarbons**.
- 262) The combustion products of hydrocarbons are **carbon dioxide and water**. Heat is also released.
- 263) The percentage of **methane** in the natural gas **85-90%**.
- 264) **Soap** is the sodium or potassium salt of fatty acid.
- 265) Animals **fats** and vegetable oils act as **raw materials** in making **soap**.
- 266) **Plastics** are **polymers** which are usually made from small molecules (**monomers**) under **high pressure and temperature**.
- 267) **Low density polyethene** made under a **pressure of 2000** atmosphere at **200°C** is used for making bags, sheet and in insulation.

Exercise

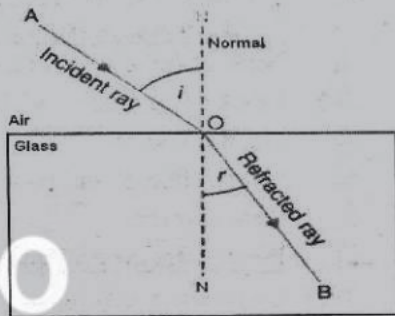
- 268) During a physical change the chemical composition of substance.....
- a) Change **b) Doesn't change**
c) Permanently change d) None of these
- 269) Hydrocarbons are the compounds of carbon and.....
- a) Oxygen **b) Hydrogen**
c) Nitrogen d) Chlorine
- 270) Polythene is a
- a) Monomer **b) Polymer**
c) Element d) Fertilizer
- 271) The products of burning hydrocarbons are
- a) **CO₂ and HO₂** b) CO₂ and oxygen
c) Oxygen and water d) None of these
- 272) The reason for a physical change to be named as such is that the.....
- a) **Change occurs only in physical properties** b) Is a reversible change
c) Transfer of energy takes place d) all of the above
- 273) When ice is heated, it changes to water and water on further heating gets converted to steam. What happens when steam is condensed?
- a) A new substance is formed b) No new substance is form
c) Gaseous phase changes to liquid phase **d) Both (b) and (c) are correct**

- 293) The flow of heat by conduction is generally observed in case of.....
- a) **Solid** b) Liquid c) Gases d) all of these
- 294) In which mode of heat transfer does the transfer of heat occur as a wave?
- a) **Radiation** b) Conduction c) Convection d) all of these
- 295) Which of the following is a good conductor of heat?
- a) Wood b) Plastic **c) aluminum** d) none of these
- 296) In sea breeze.....
- a) **Cold air move from sea towards land during day time**
b) Hot air moves from sea towards land during day time
c) Cold air moves from land towards sea during day time
- 297) In land breeze.....
- a) Cold air moves from sea towards land during day night
b) Hot air moves from sea towards land during night
c) **Cold air moves from land towards sea during night**
d) None of the above is correct
- 298) Black or dark colored clothes are worn in cold climates because these are.
- a) Good reflector
b) Good reflector and poor absorber
c) Poor absorber
d) **Poor reflector and good absorber**
- 299) Convection only occur in.....
- a) **Liquid and gases**
b) Solid and gases
c) Liquids and solids
d) Liquids and metals
- 300) We receive heat energy from sun throughmode of transmission.
- a) Conduction
b) Convection
c) **Radiation**
d) None of the above
- 301) Conduction is possible
- a) When the bodies are apart from each other
b) When the bodies have same temperature and in thermal contact
c) When they have different temperatures maintaining distance between them
d) **Bodies should be in contact and should have different temperature**
- 302) What do you mean by heat?
- a) Heat is a measure of temperature
b) Heat is a form of potential
c) **It is form of energy which gets transferred from a hot to cold body**

Dispersion of Light

Unit No: 9

- 303) The medium in which light travels faster is known as rare medium.
- 304) The medium in which light travels slower is known as denser medium.
- 305) Air is rare than water.
- 306) Water is rare than glass.
- 307) The light ray that strikes a surface is called incident ray.
- 308) The light ray that bends in the second medium is called refracted ray.
- 309) An imaginary perpendicular line which is drawn at the point of incidence of light ray is called Normal.
- 310) When light goes from air to glass it bends towards the normal at the interface is called angle of incident.
- 311) When light leaves the glass it bends away from the normal is called angle of refraction.
- 312) The angle of refraction is smaller than the angle of incidence.
- 313) When light travels from a rarer to denser medium it bends towards the normal.
- 314) When light travels from denser medium to rarer medium it bends away from the normal.
- 315) The angle the ray then makes with the normal inside the glass is called the critical angle.
- 316) When the incident ray falls normally to the surface of glass slab, then there is no bending of ray of light and it goes straight.
- 317) Speed of light in air is 3×10^8 m/s.
- 318) Speed of light in glass is 2×10^8 m/s.
- 319) Refractive index of water is 1.33.
- 320) Refractive index of glass is 1.5.
- 321) Refractive index of air is 1.0003.
- 322) Highest refractive index of diamond is 2.42.
- 323) Periscope is a long tube at the two ends of which are adjusted to two totally reflecting prisms.
- 324) In the periscope the ray of light from an object are totally reflected through an angle 90° by each prism.
- 325) In the year 1665, Newton discovered by his experiments with glass prisms that white light (sun light) consists of a mixture of seven colors.
- 326) The phenomenon of splitting up of white light into its component colors is called dispersion of light.
- 327) Rainbow is the example of dispersion of white light. The rainbow upper color is red and lower color is violet.
- 328) Seven colors are Red, Orange, Yellow, Green, Blue, Indigo, and Violet. Or VIBGYOR. For Remembering this colors...(YOUR BIG).....(YOVR BIG)
- 329) Red, Green, and Blue are called primary color of light.
- 330) The colors produce by mixing any two primary colors are called secondary colors.



- a) Red + Green = Yellow
 b) Red + Blue = Magenta
 c) Green + Blue = Cyan (peacock blue)
 d) Red + Blue + Green = White
 e) Yellow + Blue = White
 f) Red + Peacock blue = White
 g) Green + Magenta = White

Exercise

- 331) When light enters from one medium into another, it bends slightly from its original path. This bending is called.....
 a) Reflection
 b) Refraction
 c) Dispersion
 d) Total internal reflection
- 332) When light enters from air into glass it bends reflection.....
 a) Towards normal
 b) Away from normal
 c) Does not change the path
 d) all the light is reflected
- 333) After rain, when sunlight falls on tiny rain drops suspended in the air, rainbow is produced due to.....
 a) Reflection of light
 b) Refraction of light
 c) Dispersion of light
 d) Diffraction of light
- 334) The primary colors of light are.....
 a) Red, green, yellow
 b) Red, green, blue
 c) Red, yellow, blue
 d) Green, yellow, blue
- 335) In the deserts, mirage is seen due to which phenomenon
 a) Reflection
 b) Refraction
 c) Diffraction
 d) Total internal reflection
- 336) The upper color of rainbow is.....
 a) Green
 b) Red
 c) Yellow
 d) violet
- 337) The lower color of rainbow is.....
 a) White
 b) Magenta
 c) Green
 d) Violet
- 338) When red and blue are combined together.....
 a) Yellow
 b) Magenta
 c) Orange
 d) Purple
- 339) A magenta filter absorbs.....
 a) All color except red
 b) All colors except magenta
 c) Magenta only
 d) Magenta and its components
- 340) Light travels
 a) Faster than sound
 b) Slower than sound
 c) Faster than gamma rays
 d) Faster than x-ray
- 341) When a virtual image is created in a plane mirror
 a) The image is upright.
 b) The image is located behind the mirror
 c) Reflected rays diverge.
 d) All of the above

- 342) On rainy day, small oily films on water show brilliant colors. This is due to..
 a) Scattering
 b) Interference
 c) Polarization
 d) None of these
- 343) Rainbow formation is due to.....
 a) Absorption of sunlight by water droplets
 b) Diffusion of sunlight through droplets
 c) Ionization of water droplets
 d) refraction and reflection of sunlight by water droplet
- 344) Refraction is caused by.....
 a) Different wave speeds.
 b) More than one reflection.
 c) Displaced images.
 d) Bending.
- 345) A rainbow nicely illustrates an example of light.....
 a) Internal reflection
 b) Refraction
 c) Both (a) and (b)
 d) Neither (a) and (b)
- 346) The law of reflection says that
 a) The angle of reflection from a mirror equals the angle of incidence.
 b) Waves incident on a mirror are partially reflected.
 c) All waves incident on a mirror are reflected.
 d) The angle a ray is reflected from a mirror is random.
- 347) A star appears twinkling in the sky because of.....
 a) Scattering of light by atmosphere
 b) Reflection of light by atmosphere
 c) Refraction of light by atmosphere
- 348) The shortest plane mirror in which you can see your entire image.....
 a) Half your height.
 b) Twice your height.
 c) Equal to your height.
 d) Depends on how far the mirror is from you.

Sound Waves

Unit No: 10

- 349) Sound is made by vibrating objects.
- 350) Sound travel in solids, liquids and gases.
- 351) A wave in which the particles of the medium vibrate back and forth in the same direction in which the wave is moving is called a longitudinal wave.
- 352) Speed of sound in Dry air at 0°C ——— 332 m/s.
- 353) Speed of sound in Dry air at 20°C ——— 344 m/s.
- 354) Speed of sound in Water at 20°C ——— 1498 m/s.
- 355) Speed of sound in Sea-water at 0°C ——— 1531 m/s.
- 356) Speed of sound in blood at 37°C ——— 1550 m/s.
- 357) Speed of sound in iron or steel at 20°C ——— 5130 m/s.
- 358) Speed of sound in Glass at 20°C ——— 3962 m/s.
- 359) A wave in which the particles of the medium vibrate up and down perpendicular to the direction, in which the wave is moving, is called a transverse wave.
- 360) Transverse waves can be produced only in solids and liquids but not in gases.

- c) Meters (m) d) Pascal (Pa)
- 380) Like light, sound cannot.....
- a) Pass through transparent solid b) Pass through air
- c) Pass through liquid **d) Pass through vacuum**
- 381) Which of the following is not electromagnetic wave.....
- a) Y-rays **b) Cosmic ray**
- c) Microwave d) None of these
- 382) To hear a clear echo, the minimum distance should be.....
- a) 165 feet b) 165 meter
- c) 16.5 feet **d) 16.5 meter**
- 383) A cut diamond sparkles because of its
- a) Hardness **b) High refractive index**
- c) Emission of light by the diamond d) Absorption of light by the diamond
- 384) An example of longitudinal wave is.....
- a) **Slinky spring** b) Energy
- c) Water wave d) Light

Circuits and Electric Current

Unit No: 11

- 385) The flow of electron is called current. $I = \frac{Q}{t}$
- 386) The unit of current is amperes or amps.
- 387) The complete path for the flow of current through the wire the cell and the filament of the bulb are called circuit.
- 388) A series circuit provides one path for the current flow in the circuit.
- 389) Parallel circuit provides separate paths for the current flow.
- 390) An electric circuit is a complete unbroken path through which electric current can flow, such a circuit is called closed circuit.
- 391) When there is no break in a circuit, no electric current is flow; such type circuit is called open circuit.
- 392) A light bulb transforms electric energy to light energy.
- 393) A radio and electric bells transforms electric energy to sound energy.
- 394) A fan converts electric energy into mechanical energy.
- 395) The chemical effect of current is used (1) In electroplating (2) In the extraction of metal (3) In the purification of metals
- 396) The difference in electrical potential of the charge is called the potential difference or voltage.
- 397) The difference in electrical potential is called voltage (V) and is expressed as work done (W) per unit charge (Q). $V = \frac{W}{Q}$
- 398) The unit of voltage is volt.
- 399) Alessandro Volta who invented the first chemical battery.
- 400) The opposition to the flow of current is called resistance.
- 401) Resistance is represented by "R" and measure in ohms (Ω).
- 402) A component which is used to close or break a circuit is called switch.

25

- 403) A component which provides resistance is called **resister**.
- 404) The relationship between voltage, current, and resistance according to Ohm's law....
Voltage (V) = Current (I) × Resistance (R)
- 405) An **ammeter** is the device to **measure** the amount of **current**.
- 406) **Voltmeter** is a device which is used for measuring **voltage**.
- 407) **Miniature circuit breakers (MCB)** is **automatically switches off** the electrical circuit during **abnormal condition** of the network.
- 408) A **fuse** is a **safety device** of a thin wire having **low melting** point which melt and breaks the circuit.

Exercise

- 409) A fuse is used to.....
- a) Prevent electrical flow
b) Save electrical energy
c) **Prevent excessive current**
d) Increase voltage
- 410) The earth wire.....
- a) Prevent excessive current flow
b) **Prevent electrical shocks**
c) Prevent the appliance from exploding
d) Protect the appliance from floating voltage
- 411) Change in motion produces.....
- a) **Current**
b) Voltage
c) Circuit
d) Energy
- 412) The larger unit of electricity is.....
- a) Joule
b) Watt
c) **Kilowatt**
d) Ampere
- 413) The smallest unit of electricity is.....
- a) **Joule**
b) Watt
c) Kilowatt
d) Ampere
- 414) Two kilowatt hour is the energy.....
- a) **3600000 joule**
b) **720000 joule**
c) 800000 joule
d) 10800000 joule
- 415) A short thin piece of wire which is heated up and melt by flowing of electric current in it, is called.....
- a) Circuit
b) **Fuse**
c) Cell
d) Resister
- 416) A circuit which splits into two or more branches is called
- a) Series circuit
b) Open circuit
c) **Parallel circuit**
d) Close circuit
- 417) In a circuit when an electric current flows in continues path, it is called.....
- a) **Close circuit**
b) Open circuit
c) Hot circuit
d) Blocked circuit
- 418) If more resistors are added in a series circuit resistance will be.....
- a) **Increased**
b) Decreased
c) Equal
d) Constant

Investigating the Space

Unit No: 12

25

- 419) **Galaxies** are the **building blocks** of the **universe**.
- 420) All the **galaxies** are **traveling** away at a **great speed**.
- 421) The **big bang theory** of the origin of the universe was proposed by **Edwin Hubble**.
- 422) The **Sun** is the **nearest star** to the **earth**.
- 423) Each second **600,000,000 tons** of **hydrogen** are converted to **helium** in the Sun.
- 424) According to the **big-bang theory**, "all the matter in the universe was originally **constructed** in one **micro meter**".
- 425) According to the **steady state theory** of the beginning of the universe "the universe is unchanging it appear the same at all time and all points. The universe **did not have** a **beginning** and it will not have an **end**.
- 426) **Light ray** travels at a **speed** of **300,000 km/second**.
- 427) **After sun** the **nearest star** is **Alpha Centauri** whose distance is **4.5 light years**.
- 428) **Star** in the sky appeared to make **patterns**. These group or patterns are called **constellations**.
- 429) The **two** important **galaxies** in the **universe** are
(1) **milky way** (2) **Andromeda galaxy**
- 430) Our **own galaxy** is the **Milky Way**.
- 431) The **Milky Way galaxy** is a **spiral type** of galaxy.
- 432) **Andromeda galaxy** is the **closest galaxy** to the **Milky Way**. It is only galaxy that can be **seen** with the **naked eye** from the earth.
- 433) **Stars** are formed in **huge clouds** of **gas** and **dust** called **nebulae**.
- 434) A **black hole** has a very **strong gravitational field**.
- 435) The **light from sun** reaches the **earth** in about **8 mints**.
- 436) The **sun star** is **150 million km** away from **earth**.
- 437) The **mass of sun** 2×10^{30} **kg**.
- 438) Composition of sun **74% H**, **25% He**, and **1%** other gases.
- 439) There are **8 planets** in **solar system**.
- 440) The **nearest** and **smallest planet** to the sun is **mercury**. Its temperature about **430°C**.
- 441) **Earth** distance from **moon** is **384400 km**.
- 442) **Second nearest planet** to the sun is **Venus**. Its temperature about **464°C**. **Venus and earth** are almost **similar** in size, mass, composition, and gravity.
- 443) **Third nearest** planet to the sun is **earth**. Its distance from sun is **150 million km** from sun. And its **mass** is about 6×10^{24} **kg**.
- 444) **Mars** is the **forth** and **second smallest planet** of the solar system.
- 445) Mars has **two** moon called **Phobos** and **Deimos**.
- 446) **Mars** also called **red planet**.
- 447) **Jupiter** is the **fifth** and **largest planet** of the solar system.
- 448) **Jupiter** has **63 moons**.
- 449) **Saturn** is the **6th** and **second largest planet** of the solar system.
- 450) **Saturn** has **53 or 61 moons**.
- 451) **Uranus** is the **7th** and **forth largest planet** and **coldest** of the solar system.

- 452) Uranus has 27 moons.
453) Neptune is the 8th and 3rd largest planet of the solar system.
454) Neptune has 14 moons.

Exercise

- 455) The building block of the universe is.....
a) Earth
b) Sun
c) Galaxy
d) None of these
- 456) Light rays travel at speed of.....
a) 332kms^{-1}
b) 3000kms^{-1}
c) $300,000\text{kms}^{-1}$
d) 300kms^{-1}
- 457) The Milky Way is
a) Spiral
b) Elliptical
c) Irregular
d) All of the above
- 458) A black hole has a very strong.....
a) Electric field
b) Gravitational field
c) Magnetic field
d) Electromagnetic
- 459) The light from the Sun reaches the earth in about.....
a) 4 minutes
b) 6 minutes
c) 8 minutes
d) 10 minutes
- 460) Minimum average distance of Sun from Earth is.....
a) 150 million kilometers
b) 250 million kilometers
c) 350 million kilometers
d) 450 million kilometers
- 461) "Asteroids" that are made up of silicate rocks and clay are known as.....
a) C-Type asteroid's
b) M-Type asteroids
c) S-Type asteroid's
d) R-Type asteroid's
- 462) Most primitive bodies in solar system are.....
a) Comets
b) Kuiper
c) Meteorite
d) Planet
- 463) Heavenly bodies which revolve around sun are called.....
a) Asteroids
b) Planets
c) Stars
d) Galaxies

GENERAL SCIENCE

(جزل سائنس)

Nervous System

Unit No: 1

1. An organ system in the human body which carries massages and makes us feel and react to things and situation is called nervous system.
2. Nervous system consists of neurons and tissues.
3. The nervous system is divided in to two parts.
a) The central nervous system b) The peripheral nervous system
4. The central nervous system (CNS) also divides two parts.
a) Brain b) Spinal cord
5. **Brain:** The brain of an adult human being weights about three pound and has more than 100 billion neurons.
6. The human brain is enclosed in a bony case called the cranium (کھوپڑی).
7. The brain is protected by three layers of connective tissues called meninges.
8. Between the layers of meninges is a fluid. The fluid protects the brain.
9. The brain itself has three main parts called
a) Fore brain
b) Mid Brain
c) Hind brain

Forebrain:

10. Forebrain consists of three parts
a) Cerebrum
b) Thalamus
c) Hypothalamus
11. Cerebrum is the top most and the larger part of the brain. And divide in left and right cerebral hemispheres.
12. The right cerebral hemispheres control movement and activities of the left side.
13. The left cerebral hemispheres control activities of the right side.
14. Forebrain is part of the brain that interprets signals from your body and forms responses such as hunger, thirst, emotion, pain and also responsible for intelligence thinking and judgments etc.



15. Inside the cerebrum, there is a small structure called thalamus. It acts as a processing center between the body and the cerebrum.
16. At the base of the thalamus is the Hypothalamus which regulates body temperature hunger and thirst.

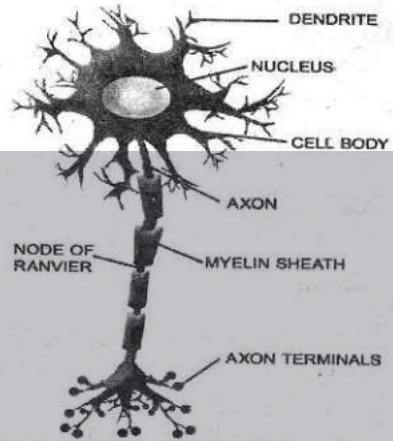
Mid brain:

17. Mid brain is the central part of brain.
18. Its basic function is to transfer information and impulses between forebrain and hind brain.
19. Mid brain is associated with vision, hearing, sleep/wake and temperature regulation.
20. The midbrain also controls some reflexes such as changing the size of the pupil to control the amount of light entering the eye.

Hindbrain:

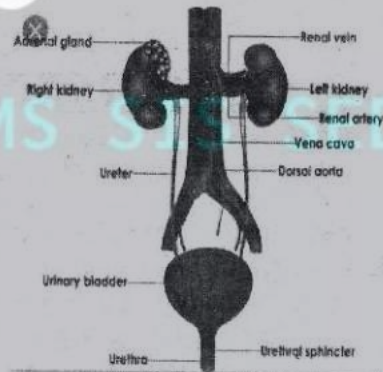
21. Hindbrain consists of cerebellum, Pons and medulla oblongata.
22. Cerebellum is the part of the brain that coordinates body movements. Its helps the body balances.
23. Pons regulated breathing and passes signals between the brain and spinal cords.
24. The medulla oblongata connects the brain to the spinal cords.
25. Medulla oblongata controls basic life functions such as heart beat, blood pressure, vomiting etc.
26. Spinal Cord: The vertebral column consists of vertebrae and spinal cord. The spinal cord is a rope like bundle of neurons.
27. All signals that go to the body or come to the brain, pass through the spinal cords.
28. When spinal cords are damaged messages cannot move between the brain and the rest of the body these results in paralysis.
29. The peripheral Nervous system (PNS) is the collection of nerves that connects the central nervous system (CNS) to all your organ systems.
30. The PNS uses sensory neurons to detect stimuli from inside and outside of your body and it uses motor neurons to carry signals from the CNS to other parts of the body and stimulated your muscles or other target organs.
31. The PNS includes 12 pairs of cranial nerves those which branch out from the brain and go to many places in head such as ear, eyes, and face etc.
32. 31 pairs of spinal nerves which branch out from the spinal cord.
33. In short the PNS is made up of a sensory system and motor system.
34. The system of sensory nerves collects information from the body and its surroundings.
35. Motor nerves are responsible for producing voluntary responses (ارادی۔ اپنی خوشی سے کام کرنے) and involuntary response (غیر ارادی طور پر)۔
36. Neuron is the smallest structural and functional unit of nervous system.
37. Neuron consists of two parts 1) Cell body 2) Axon
38. The cell body is thicker region of the neuron containing the nucleus and most of the cytoplasm.
39. Axon is a long projection that carries impulses away from the cell body.

40. Neuron has a **single axon**.
41. The **thread like projections** on the cell body called **dendrites**.
42. Fatty substance covering the axon from **myelin sheath**.
43. Neurons are of **three types**.
44. **Sensory neurons**: they carry nerve impulses (stimulus) from receptors to CNS.
45. **Motor neurons**: these neurons take impulses away from CNS to effectors.
46. **Associative neurons**: Nerve cells found in CNS that link sensory and motor neurons. They are responsible for analyzing the message and issuing order.
47. The collection of neuron cell bodies is called **gray matter** because of its dark gray color.
48. The **collection of axons** is called **white matter** because the myelin sheath on the axons gives them white appearance.
49. In the brain the **gray matter** is on the **outside** and the **white matter** is on the **inside**.
50. The special organs, tissues or cells, which detect stimuli, are called **receptors**.
51. An immediate and involuntary response to a stimulus is called **reflex action**.
52. **People blink** about **15 times per minute**. During the **16 hours** when you are awake, you blink approximately **14,400** times each day.



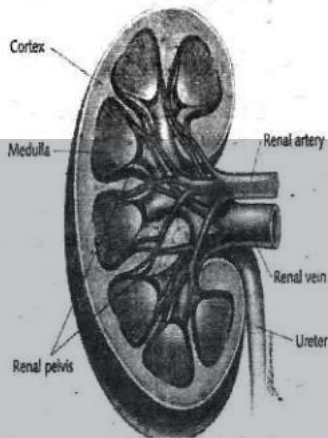
Excretion and Excretory system:

53. The system that helps to **eliminate waste materials** from the **body** is called **excretory system**.
54. The process of removing the waste product from the body is known as **excretion**.
55. Excretory system removes **non solid wastes** through **sweat (پسینہ)**, **urine (پیشاب)** and **exhalation (سانس باہر نکالنا)**. It also helps to maintain stability in the body.
56. The **main organs** of this system are the **skin, lungs** (وہ نالی جو گردوں سے پیشاب مٹانہ میں لے لے), **kidney (گردہ)**, **ureter** (جانبی پھپھڑے), **urinary bladder (مٹانہ)**, and **urethral (نالی خارج کرنے والی نالی)**, etc.
57. The **structural and functional unit** of kidney is called **nephron**.
58. The kidneys are organ that remove wastes by filtering and cleaning the blood to produce **urine (پیشاب گاہ)**. This urine moves through ureters, is collected in the bladder and excreted by the urethra.
59. Kidney is divided in **three regions**.
60. 1) **Renal cortex** is the outer most regions.
61. 2) **Renal medulla** is the middle region.
62. 3) **Renal pelvis** is the inner area where urine is drained.



Role of kidneys:

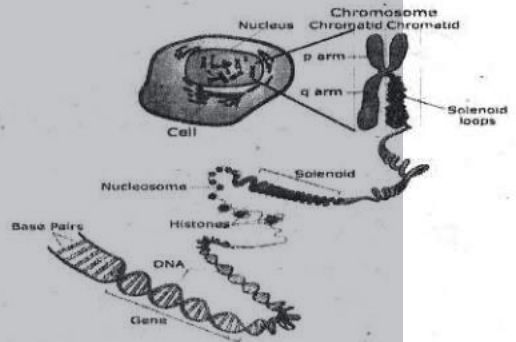
63. The kidneys are among the main organs responsible for maintaining fluid and chemical balances in your body within the limits that support life.
64. One quarter of your blood supply passes through your kidney every minute.
65. The most common kidney problems are kidney stone, high blood pressure, and diabetes.
66. Excretory organs of human body are called kidneys.
67. The brain of adult human weights between 1300 and 1400 gm.
68. The brain of cat weight about 30 gm.
69. The weight of dogs about 70 gm.
70. The brain of a dolphin about 1600 gm.
71. The weight of elephant is about 6000 gm.
72. Homeostasis is the regulation of water, minerals and salts within the body.
73. First artificial kidney was developed by Abel, Rountee, and turner in 1913.
74. The cleaning of patient blood artificially with the help of a machine is called dialysis.

**Exercise**

75. Sensory neurons carry messages towards.....
- a) Muscles
b) Muscles and glands
c) Sense organs
d) Brain and spinal cord
76. The part of neuron which receives messages are.....
- a) Cell bodies
b) Dendrites
c) Axon
d) Nuclei
77. Accumulation of salts in kidneys results in.....
- a) Diabetes
b) Hypertension
c) Kidney stone
d) cancer
78. Medium sized stones are removed by.....
- a) Dialysis
b) Lithotripsy
c) Excretion
d) Laser
79. Renal failure can be caused by.....
- a) Infection
b) Hypertension
c) Diabetes mellitus
d) All of these
80. How many parts of human brain.....
- a) 3
b) 4
c) 5
d) 6
81. Which one regulate breathing.....
- a) Medulla Oblongata
b) Midbrain
c) Pons
d) Thymus

Identification of DNA and chromosomes in cell diagram:

99. The transfer of characteristics from parents to their offspring (ذریعہ) is called **heredity**.
100. The bases of **heredity** are the following material present in the **nucleus**.
101. **Chromosomes:** A chromosome is the basis of heredity.
102. Chromosomes made up of **two types** of molecules, **DNA** and **protein**.
103. **DNA (De Oxy Ribo Nucleic Acid):** DNA is made up of units called **nucleotides**.
104. Each **nucleotide is composed** of the following **three** components.
1) Deoxyribose sugar 2) Phosphoric acid
3) Nitrogenous base
105. The **shape of DNA** looks like **twisted ladder** (پیرامی کی مانند) which is called **double helix** shape.
106. **Genes:** Genes are the **basic units** of **heredity** located on **chromosomes**.
107. The **genes of free ear lobes** are **dominant** (غالب) to **attached ear lobes**.

**Exercise**

108. Humans have Pairs of chromosomes.
a) 25 b) 40 c) **23** d) 12
109. Living organisms have a set of characteristics that are transferred from.....
a) Environment b) School c) **Parents** d) All of these
110. Chromosomes are made up of
- a) **DNA and protein** b) DNA c) Protein d) Fats
111. Transfer of traits from parents to offspring's is called.....
a) **Heredity** b) Reproduction c) Transformation d) Division
112. The color in human beings is controlled by.....
a) **Gens** b) Nucleus c) Cytoplasm d) Meiosis
113. Conversion of cell into two new daughter cells is called.....
a) Cell growth b) Cell death c) **Cell division** d) Cell inheritance
114. Cells having the half number of chromosomes are called
- a) Somatic b) **Daughter** c) Parents d) Gametes
115. Who is known as the "father of Genetic".....
a) Morgan b) **Mendel** c) Watson d) Bateson
116. The inheritance of skin color in humans is an example of which of the following....
a) Epistasis b) Gene linkage c) **Polygenic inheritance**
117. Which section of DNA provides information for one protein.....
a) Nucleus b) Chromosomes c) Trait d) **Gene**

118. Which of the following best expresses the concept of the word "allele"?
- a) Genes for wrinkled and yellow
 b) Genes for wrinkled and round
 c) Phenotypes
 d) The expression of agene
119. Which of the following factors could lead to variations in the offspring of asexually reproducing organism?
- a) Crossing over
 b) fertilization
 c) Mutations
 d) independent assortment

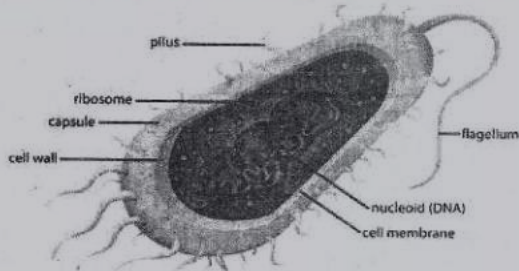
Biotechnology

Unit No: 3

120. Biotechnology is a branch of science in which living things are used to make better or new products.
121. In biotechnology the genetic material (DNA) of microorganisms is used for production of required product.
122. DNA is made up of units called nucleotide.
123. There are four type of nucleotide (1) adenine nucleotide (2) guanine nucleotide (3) cytosine nucleotide (4) thymine nucleotide
124. The process in which the DNA of a cell is duplicated to make two similar copies of the parents DNA is called Replication.
125. Chromosomes are the colored body present in the nucleus.
126. Chromosome is made up of DNA, coiled many times around a protein called histone.
127. Genes occur in pairs and are located on chromosomes.
128. Insulin is produced by genetic engineering for the treatment of diabetic patients.

Bacteria:

129. Bacteria are unicellular organisms.
130. Cytoplasm, the fluid inside the cell.
131. Bacteria doesn't has nucleus.
132. Each bacterium has a single chromosome present in the cytoplasm is called nucleoid.
133. Tail like structure that help bacteria move is called flagella.
134. Outer side of bacteria cell is called cell wall.
135. DNA replication is process of copying DNA molecule.
136. A gene is the unit of hereditary material which contains all the information of organism characteristics.
137. The bacterium which takes in the recombinant DNA is called transgenic bacterium or genetically modified bacterium (GMB).
138. Penicillin is an example of antibiotic.
139. The four major areas in which biotechnology techniques are applied include agriculture, food production and preservation, health and environment.



140. Herbicides and pesticides are used to eliminate weeds and insects and thus protect crops.

Exercise

141. The additional circular pieces of DNA represent in bacterial cell are called
- a) RNA
b) Chromatid
c) Plasmid
d) Nucleotide
142. The branch of science in which having organisms are used for the welfare of humans is called.....
- a) Biotechnology
b) Biochemistry
c) Microbiology
d) Genetics
143. Plasmid and attached foreign gene with it are collectively called.....
- a) Recombinant cell
b) Recombinant DNA
c) Recombinant plasmid
d) Recombinant chromosome
144. The organism whose genes are modified is called.....
- a. GM organism
b) Transgenic organism
c) Recombination organism
d) All of These
145. A gene is inserted into a bacteria by.....
- a) Digestion
b) Genetic engineering
c) Fermentation
d) Biodegrading
146. Penicillin is an example of.....
- a) Enzyme
b) Hormone
c) Antibiotic
d) Antigen
147. The bacteria generally used for generic engineering is.....
- a) Agrobacterium
b) Bacillus
c) Pseudomonas
d) Clostridium
148. Which is not transgenic plant?
- a) Soybean
b) Maize
c) Golden rice
d) Cucumber
149. The crops having cry genes need.....
- a) No insecticide
b) Mild quantity of insecticide
c) Large amount of insecticide
d) 5 kg insecticide
150. The process in which the DNA of a cell is duplicated to make two similar copies of the parents DNA is called.....
- a) Production
b) Construction
c) Replication
d) None of these
151. A small circle of DNA found outside the main chromosome is called a.....
- a) Genetic fingerprint
b) Episome
c) Plasmid
d) Protein
152. Multicellular organisms that carry a specific genetic change in each cell because of an intervention at the embryo level are a
- a) Trans version
b) Transition
c) Transgenic
d) Transforming

Pollutions and Their Effect on Environment**Unit No: 4**

153. Any unwanted and undesirable change in the environment that affects the atmosphere and disturbs the ecosystem is called **pollution**.
154. **Major types** of pollution are, (1) air pollution (2) Water pollution (3) Soil pollution (4) Noise pollution
155. Pollution began to be recognized as a series threat during the **industrial revolution** of the **19th century**.
156. Sulphur dioxides (**SO₂**), Oxides of Nitrogen (**NO₂, NO**), Carbon monoxides (**CO**), and Chlorofluorocarbons (**CFCs**), are main pollutants, of environment.
157. **Chlorofluorocarbons (CFCs)** are nontoxic, nonreactive chemicals. They are the major cause of **breakdown of ozone layer**, allowing more **ultra violet light** to reach the earth.
158. **CFCs** are **used** as aerosol spray, as cooling agent in refrigerators and air conditioners, and in form of packing.
159. **CO₂, CH₄**, and other gases absorb infrared radiation and reflect it back to land causing increase in average temperature of environment. This is called **Greenhouse effect**. OR
160. The solar radiation enters the earth atmosphere and reaches the earth surface. Some of the solar radiation is absorbed by the earth surface while the remaining re-radiated in to the atmosphere. The large amounts of CO₂ in the atmosphere blocks and absorb the outgoing radiation causing heating of earth. This is called **greenhouse effect**.
161. The formation of acid in rain-water by its mixing with pollutants like **SO₂, CO₂**, and **NO₂**, is called **acid rain**.
162. When the above gases dissolved in rain water, they make their acids, **H₂SO₄** and **HNO₃**, respectively.
163. **Removal** of the **forests** for human use is called **deforestation**.
164. **Deforestation** causes many problems like Soil erosion, Green House effect, and air pollution.
165. **Coal power plants** are one of the large contributors to polluting earth.
166. Protecting natural resources is called **conservation**.
167. **Effects of carbon monoxide** are damage to central nervous system, heart, respiratory problem, nausea and dizziness etc.
168. Effects of **Sulphur dioxide** are eye, nose, throat, and lung cancer etc.

Exercise

169. Which of the following is not a greenhouse gas.....
- a) Methane b) Carbon dioxide
- c) **Hydrogen** d) Nitrous oxide
170. The main reason for increase in the amount of carbon dioxide in an air is.....
- a) Plantation b) **Deforestation**
- c) Recycling d) Using CFC's
171. The phenomenon which does not lead to global warming.....
- a) Green house effects b) Ozone depletion

- c) CFC's
 172. Ultraviolet radiations from Sun that reach the earth cause.....
 a) Respiratory disorder
 c) Skin cancer
 173. The source of all of the following pollutants in vehicle exhaust EXCEPT.....
 a) Carbon mono-oxide
 c) CFC's
 174. Ozone layers filters.....the from Sun light.
 a) Infrared rays
 c) Infrared rays
 175. Sulphuric acid is formed from.....
 a) N₂
 c) SO₂
 176. Which one of the following is a non-renewable resource.....
 a) Forest
 c) Petroleum
 177. Protecting natural resources is called
 a) Pollution
 c) Industrial process
 178. At least 25% of the total area of the country must be covered by forests but in Pakistan only.....of the total area is covered.
 a) 5%
 c) 15%
 179. Ozone layer made up ofOxygen. (O₃)
 a) One
 c) Three
 180. One chlorine molecule from CFCs can destroy up toozone molecules.
 a) 100
 c) 10,000
- d) Photosynthesis
 b) Typhoid fever
 d) Bronchitis
 b) Carbon dioxide
 d) Nitrogen oxides
 b) Cosmic rays
 d) radioactive rays
 b) CO₂
 d) CO
 b) Agriculture
 d) Air
 b) Conservation
 d) Deforestation
 b) 10%
 d) 20%
 b) Two
 d) Four
 b) 1000
 d) 100,000

Chemical Reactions

Unit No: 5

181. The process of formation or breaking of a chemical compound is called chemical reaction.
182. Digestive of food, process of respiration, Replication of DNA etc. are the example of chemical reaction inside our body.
183. Elements or compounds combining in a chemical reaction are called reactants.
184. Similarly the elements or compounds formed as a result of chemical reaction are called products.
185. Example of reactants and products (C+O₂ (Reactant) ----->CO₂ (Product))
186. In 1785 Lavoisier a French scientist proves that by experimentally "Matter can neither be created nor destroyed during a chemical reaction but it may undergo change in shape and composition".

187. **Addition Reaction:** These reactions are also known as synthesis or combination reactions. When two different element or compounds react together to form a single compound then the reaction will be called an addition reaction.
188. **Example** of addition reaction: $2\text{H}_2 + \text{O} \rightarrow 2\text{H}_2\text{O}$
189. **Decomposition Reaction:** Some compound on heating decomposes to simpler compounds or elements. This type of reaction is called decomposition.
190. **Example** of decomposition Reaction: $\text{CaCO}_3 \rightarrow \text{CO}_2 + \text{CaO}$
191. **Heat** evolved or absorbed **during a chemical reaction** is called the **heat of reaction**.
192. There are **two types** of reactions with respect to energy changes. (1) Exothermic reaction (2) Endothermic reaction
193. Chemical reaction in which **heat is released** (cools) is called **exothermic reaction**.
194. Chemical reaction in which **heat is absorbed** (hot) is called **endothermic reaction**.
195. The total energy of the **products** in **exothermic reaction** is **less than** that of the reactants.
196. In **endothermic** reaction total energy of the **products** is **more than** that of reactants.
197. The life on this planet earth is possible due to the **exothermic reaction** taking place in the sun.

Exercise

198. $2\text{KCl}_3 \rightarrow \dots + 3\text{O}_2$
- a) 3KCl b. 2KCl c. KCl d. $\frac{1}{2}\text{KCl}$
199. $3\text{H}_2 \rightarrow \dots + 2\text{NH}_3$
- a) N b. N_2 c. 2N d. $\frac{1}{2}\text{N}$
200. Substances on the left hand side of a chemical equation are called.....
- a) Electrons b. Groups c. Products d. Reactants
201. The reaction in which there is only one reactants, which must be a compound is
- a) Decomposition b. Displacement c. Synthesis d. None
202. Number of atoms of reactants is equal to number of product a balanced chemical equation.
- a) Sometime b. Often c. Always d. Never
203. The heat evolved or absorb during a chemical reaction is called.....
- a) Heat of reaction b. exothermic c. Endothermic d. Heat energy
204. If two or more substances are combined to form a product is called.....
- a) Thermal decomposition b. Combination
- c. Addition d. Combustion
205. When substance combines with oxygen while burning, reaction is termed as.
- a) Combustion b. burning
- c. Evaporation d. Both a and b
206. Processing of breaking down of any substance into smaller substance by heating is called.....
- a) Decomposition b. Evaporation
- c. Thermal decomposition d. melting

207. Natural gas is made up of compound
- a) Carbon
c. Ethane
- b. Methane
d. None
208. Power machines in factories and vehicles are examples of.....
- a) Combustion
c. Evaporation
- b. Thermal combination
d. Evaporation
209. Natural gas is more efficient and produces less.....
- a) Heat
c. Reaction
- b. Pollution
d. Evaporation
210. Changes occur in matter at
- a) Specific time
c. All the time
- b. Thermal Reaction
d. continuously
211. Irreversible changes include.....
- a) Burning of paper
c. Corrosion of material
- b. Rusting of Iron
d. all of them
212. Metal that difficult to oxidize are called
- a) Weak metals
c. Noble metals
- b. Strong metal
d. Ionic metals

Acids, Alkalis and Salts

Unit No: 6

213. There are three main compounds of chemical (Acids, alkalis, salts).

Properties of acids:

214. They are sour in test (the "acid" means sour).
215. Acid are corrosive and can burn skin and dissolve metal.
216. Their aqueous solutions are good conductor of electricity.
217. They react with metals giving salt and hydrogen gas.
218. They turn the blue litmus paper red.
219. They react with carbonates giving carbon dioxide gas.
220. They react with alkalis giving a salt and water.
221. Solution of acetic acid (CH_3COOH) called "vinegar" is used in many food preparation.

Properties of Alkalis:

222. They have bitter taste.
223. They are slippery to touch.
224. Their aqueous solution is good conductor of electricity.
225. They react with non-metals giving a salt and hydrogen gas.
226. They turn the red litmus paper blue.
227. They react with acids giving a salt and water.
228. Alkalis are commonly use in soap.
229. For the neutralization of acidity of stomach, "antacids" are used, which contain some alkalis as their main ingredient.

Properties of Salt:

230. Salt dissolved readily in water.
231. The aqueous solution of some salts are very good conductor of electricity.
232. They show no change of color on litmus paper.
233. It is neutral in nature.
234. The substance turn red when dipped in acid the pH is less than 7 (acidic)
235. Turn blue when dipped in alkalis the pH is greater than 7 (alkaline).
236. **Indicators**
- | | Acid | Alkali |
|-----------------|-----------|-----------|
| Litmus | Red | Blue |
| Methyl orange | Pink | Yellow |
| Phenolphthalein | Colorless | Deep pink |

Exercise

237. Which one of the following acids is used in car batteries.....
- a) HCl b) HNO₃ c) H₂SO₄ d) None of these
238. The color of red and blue litmus stays same in aqueous solution of.....
- a) HCl b) HNO₃ c) H₂SO₄ d) NaCl
239. The alkali used as an antacid is.....
- a) KOH b) Ca(OH)₂ c) NaOH d) Al(OH)₃
240. Which one of the following salts is used in the treatment of constipation.....
- a) NaCl b) MgSO₄ c) CuSO₄ d) NaHCO₃
241. Rose petals turn blue in.....
- a) Alkaline solution b) Acidic solution c) Salty solution d) None of these
242. Vinegar is.....
- a) Alkali b) Acid c) Salt d) None of these
243. When an acid reacts with metal carbonate, products are.....
- a) Salt b) Water c) Carbon dioxide d) all the above
244. Process in which acids (H⁺) and bases (OH⁻) react to form salts and water is called.....
- a) Neutralization b) Hydrogenation c) Halogenation d) Sublimation
245. Corrosive effect on skin is caused by.....
- a) Acid b) Bases c) Water d) Mercury
246. If pH value is greater than 7, then solution is
- a) Acid b) Basis c) Neutral d) Salty
247. What is formed by the reaction of a non-metal oxide with water?
- a) Acid b) Base c) Salt d) Metal
248. PH of water is.....
- a) 1 b) 3 c) 9 d) 7

Force and Pressure

Unit No: 7

249. **Pressure** is the force exerted on a **unit area** of a **surface**.
250. $P = \frac{F}{A}$ is the **equation** of pressure. And unite of pressure is **Nm⁻²** or **Pascal**.
251. According to **Pascal's principle** "pressure applied on a liquid in a closed container is transferred equally in all directions throughout the liquid".
252. In **hydraulic system** the force is transferred from one place to another with the help of a liquid.
253. A mechanism in which works on the Pascal's principle of fluid pressure and transmit force one place to another is called a **Hydraulic system**.
254. **Hydraulic press** is a **machine** which works on the **Pascal's principle**.
255. **Hydraulic breaks** also works on the Pascal's principle.
256. The study of behavior of gases under pressure is called **pneumatics**.
257. **Robert Boyle**, a British scientist, studied the **behavior of a gas** under **pressure**.
258. The **atmospheric pressure** around us at the ground level is about **100,000Pa** or **100KPa**.
259. Atmospheric pressure **decrease** with **increase in height** from **earth's surface**.
260. **Barometer** is a device which is **used** for the **measurement** of **atmospheric pressure**.
261. When we increase the **temperature** of a gas, then it increase the pressure of the gas movement of the molecules also increase which result in **increase of pressure**.
262. **Aerosol** is a **suspension of tiny liquid particles** dispersed in a gas present in a **closed container**.
263. **Atmospheric pressure** is the pressure exerted on the surface of any objects by the atmospheric gas.

Exercise

264. The formula of pressure $P = \dots\dots\dots$
- a) $F \times A$ b) $\frac{A}{F}$ c) $\frac{F}{A}$ d) $F \times D$
265. What is force?
- a) Pull b) **Push and Pull both** c) Push d) None of these
266. Which of the following is not a rare gas?
- a) Krypton b) Xenon c) **Ozone** d) Radon
267. A syringe gets filled due to
- a) **Air pressure** b) Water pressure c) Vapor pressure d) None of these
268. Atmospheric pressure at Peshawar is..... than Murree.
- a) **Greater** b) sometime equal c) Always equal d) less
269. Experiments show that pressure of a gas depends upon.....
- a) **Quantity and temperature** b) Atmospheric pressure c) Quantity
270. The unit of pressure is.....
- a) N b) m^2 c) **Pa** d) m/s^2
271. The SI unit of area is.....
- a) m b) **m^2** c) m^3 d) N

272. How much weight of air is always over your head.....
 a) **1000kg** b) 100kg c) 10kg d) 1kg
273. A dropper to fill ink works because of which of the following.....
 a) Friction b) Force c) **Air pressure** d) All of these
274. The pressure of the water at the bottom of the pond isat the surface of the pond.
 a) Lower than b) **higher than** c) Either lower or higher
275. The ratio of force, acting perpendicular to the area, on which it acts, is known as.....
 a) Force b) Friction c) **Pressure** d) Density
276. Magnet is an example of
 a) **Non-contact force** b) Contact force c) Muscular force d)None of these
277. Which force always opposes motion?
 a) **Friction** b) Electrostatic force c) Magnetic force d)Muscular force
278. What is the SI unit of force?
 a) Faraday b) Einstein c) Galileo d) **Newton**
279. As we go higher altitude the atmospheric pressure.....
 a) Increase b) **Decrease** c) Remain same d)None of these

Measurement of Physical Quantities

Unit No: 8

280. The **measurable things** are called **physical quantities**.
281. Physical quantities are divided into **two** categories. **Base quantity** and **derived quantity**.
282. Length, mass, Time, Temperature, Electric current, Amount of substance and intensity of light are **seven base physical quantities** in SI.
283. The **quantity derived** from **base quantities** are called **derived quantities** i.e. Volume, force, Power etc.
284. The comparison of something with some standard is known as **measurement**.
285. The standard with which things are compared is known as **unit**.
286. The **unit of base quantity** is called a **base unit**.
287. An international System employed to represent different quantities and their units is called International System of Unit.

| Quantity | Unit | Symbol |
|---------------------|----------|--------|
| Length | Meter | m |
| Mass | Kilogram | kg |
| Time | Second | s |
| Temperature | Kelvin | K |
| Electric Current | Ampere | A |
| Intensity of light | Candela | Cd |
| Amount of substance | Mole | mol |

289. Base unit of **density** (mass/volume) is **Kgm^{-3}** .
290. The base unit of **volume** (length \times width \times height) is **m^3** .

291. The base unit of **Area** (Length \times width) is **m²**.
292. The standard meter is the length of **platinum-iridium** alloy metal rod, kept at **0°C**.

| Prefix | Factor | Symbol | Prefix | Factor | Symbol |
|--------|------------------|--------|--------|-------------------|--------|
| Deka | 10 ¹ | Da | Deci | 10 ⁻¹ | D |
| Hecto | 10 ² | H | Centi | 10 ⁻² | C |
| Kilo | 10 ³ | K | Milli | 10 ⁻³ | M |
| Mega | 10 ⁶ | M | Micro | 10 ⁻⁶ | M |
| Giga | 10 ⁹ | G | Nano | 10 ⁻⁹ | N |
| Tera | 10 ¹² | T | Pico | 10 ⁻¹² | P |
| Peta | 10 ¹⁵ | P | Femto | 10 ⁻¹⁵ | F |
| Exa | 10 ¹⁸ | E | Atto | 10 ⁻¹⁸ | A |

Exercise

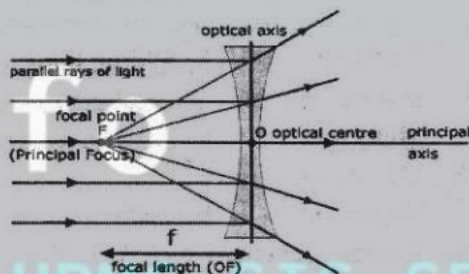
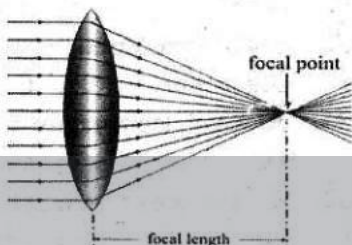
293. The comparison of something with some standard is known as.....
- a) **Measurement** b) Scale c) Quality d) Quantity
294. 25 milligrams is equal tog.
- a) 0.030 b) 1 c) 3 d) **0.025**
295. The SI unit for intensity of light is
- a) Second b) Meter c) **Candela (Cd)** d) Light year
296. Which one is a derived quantity.....
- a) **m²** b) m c) s d) kg
297. 1 Kilo is equal to.....
- a) 10² b) **10³** c) 10⁶ d) 10⁹
298. 1kg is equal to.....
- a) 100g b) **1000g** c) $\frac{1}{1000}$ g d) $\frac{1}{100}$ g
299. 1kg of water occupies volume of
- a) 10dm³ b) **1m³** c) 1dm³ d) 100cm³
300. Magnitude in 13cm is.....
- a) **13** b) cm c) 13cm d) None of these
301. Tera equal to.....
- a) 10¹⁰ b) **10¹²** c) 10⁹ d) 10¹⁵
302. 1 ml is equal to the.....
- a) 2cm² b) **1cm³** c) 100cm³ d) 1000cm³
303. The set of units is called is.....
- a) Static information b) System information
c) Set of information d) **System international**
304. Which alloy is used in standard meter and kilogram?
- a) Gold and platinum b) Platinum and californium
c) Platinum d) **Iridium and platinum**

329. In Fahrenheit scale, the distance between two fixed points is derived intoequal parts of divisions.
- a) 100°F b) 120°F c) **180°F** d) -200°F
330. Heat is transferred through.....
- a) Conduction b) Convection c) Radiation d) **All of these**
331. At which temperature, volume of water is minimum.....
- a) 0°C b) 4°C c) **100°C** d) -100°C
332. Main source of heating energy is.....
- a) **Sun** b) Coal c) Gas d) Oil
333. A very good conductors of heat contains.....
- a) Liquids b) **Metals** c) Non-metals d) Gases
334. Railway tracks have gaps between them to deal with expansion.....
- a) **Hot days** b) Cold days c) Winter d) Snow fall
335. Heat loss may help matter to.....
- a) Expand b) **Contract** c) Spread d) Stable
336. A joint which is made between adjoining rails to expand without bending is called.
- a) Rail joint b) **Sliding joint** c) Expansion joint
337. In melting of ice cube heat gain.....
- a) **Melts ice** b) Increase temperature c) Gain energy d)Release energy
338. Mercury is.....
- a) Harmless b) Safe c) Non-toxic d) **Poisonous**
339. A form of energy which flows from hotter region towards cooler region and reach on same temperature is called.....
- a) Conduction b) Convection c) Radiation d) **Heat**
340. Gain or loss of heat affect state of
- a) Air b) State c) **Matter** d) Radiation
341. On heating particles of substance expand due to.....
- a) Get bigger b) **Vibrate faster** c) Increase in shape
342. After cooling bimetallic strip bends.....
- a) **Upwards** b) Downwards c) Straight d) Inside
343. Heat which in form of infra-red waves, emitted in all directions at speed of light is
- a) Conduction b) Convection c) **Radiation** d) Expansion
344. In bridges to overcome expansion there is use of.....
- a) Rollers b) Sliding joints c) **Both a and b** d) Allowance

Lenses

Unit No: 10

345. A **lens** is made from a **transparent material** (glass/plastic).
346. Lens is a piece of transparent material which has **one or both sides spherical**.
347. A lens which is **thick at the middle** and **thinner** at the edges is called **convex lens**.
348. When parallel light rays strike the surface of a convex lens these rays **converge at a point** called **focal point (F)**. So it is called **converging lens**.
349. The lens, which is **thin at the middle** and **thicker at the edges** is called **concave lens**.
350. When parallel light ray stick the surface of **concave lens** then these rays are **diverged** after passing through lens. When these refracted rays are retracted backward, these seem to meeting at **focal point**. As these lens diverges the rays, so it is called **diverging lens**.
351. The **center O** of the lens is known as the **optical center** of the lens.
352. The center of the sphere of which any surface of the lens is a part is known as its centre of **curvature**.
353. A straight line joining the centre of curvatures is called the **principle axis**.
354. Parallel rays after refraction through a convex lens converge at a point F which is called the **principal focus** of the lens.
355. The distance between the optical centre and the principal focus is known as **focal length** of the lens.
356. The image that can be obtained on the screen is known as **real image**.
357. **Real image** of an object can be obtained on the screen by a **convex lens**.
358. **Virtual image** of an object can be obtained on screen by **concave lens**.
359. A **camera** is used to obtain image on the sensitive film. It works like human eye.
360. **Lenses** are used in microscope, telescope, cameras, and projectors etc.
361. A person suffering from short sightedness cannot see far off objects clearly. **concave lenses**
362. A person suffering from long sightedness cannot see the near objects clearly **convex lenses**.
363. There are various forms of convex and concave lenses.
364. A camera is an **optical instrument**.
365. The lens of camera forms a **real, small** and **inverted image** of an object.
366. **Double convex lens**: when both the surfaces of a convex lens are curved outward then it is called double convex lens or Bi-convex lens.



367. **Plano convex lens:** if one of the surfaces of a lens is convex and other is plane, then it is called a Plano convex lens.
368. **Double concave lens:** when both the surfaces of a lens are concave or curved inward then it is called double concave lens or Bi-concave lens.
369. **Plano concave lens:** if one of the surfaces of a lens is concave and other is plane then it is called a Plano-concave lens.
370. **Concave-convex lens:** if one of the surface of a lens is convex and the other is concave such that the central region of the lens is thicker than edges then it is called a concave-convex lens.



Exercise

372. A ray parallel to principal axis, after refraction from convex lens.....
- a) Does not bend b) Passes through center of curvature
- c) Passes through principal focus d) Passes through center of lens
373. The image formed by a concave lens is always.....
- a) Virtual b) Real
- c) Inverted d) Larger
374. Pupil of an eye is made smaller or larger by.....
- a) Lens b) Cornea
- c) Iris d) Retina
375. A line passing through center of curvature, optical center and principal focus is called
- a) Optical center b) Focal length
- c) Principal axis d) None of these
376. The camera lens forms a image of an object on the film
- a) Real, small and inverted b) virtual, small and inverted
- c) Real, large and straight d) Virtual, large and straight
377. What is the lens
- a) An image – forming device b) An image – producing device
- c) An image – reflecting device d) An object – reflecting device
378. The spherical surface of lens results in _____
- a) Having a wide range of focal length. b) Having a narrow range of focal length
- c) Having a wide range of curvature. d) Having a narrow range of curvature
379. What are Concave lenses?
- a) Thicker from the center than at the edge b) Thinner from the center than at the edge
- c) Thicker from both the positions. d) Thinner from both the positions
380. Out of the following which one is diverging or negative lens?

- a) Electrostatic
c) Magnetism
415. Dynamo is a kind of.....
a) Mechanical device
c) **Electric generator**
416. In the dry cell, zinc acts as.....
a) Positive electrode
c) Electrolyte
417. Plastic wire is.....
a) **An insulator**
c) Both of these
418. Electroplating is based on.....
a) Magnetic effect of electricity
c) Heating effect of electricity
419. Adding common salt to distilled water makes it.....
a) **Good conductor**
c) No
420. Copper wire is a.....
a) **Good conductor**
c) Both a and b
421. Poor conductors are.....
a) Plastics
c) Wood
422. Distilled water is.....
a) **Poor conductor**
c) Both a and b
423. Flow of electron is called.....
a) Electroplating
c) Electrodes
424. Electroplating prevents.....
a) Current
c) **Rusting**
425. An electric lamp glows due to.....
a) Chemical effect
c) **Heating effect**
426. Electric pressure is also called.....
a) Resistance
c) **Voltage**
427. The substances which have a large number of free electrons and offer a low resistance are called.....
a) Insulators
c) Semi-conductors
- b) Electromagnetic induction
d) **Electromagnetic force**
- b) Chemical device
d) None of these
- b) **Negative electrode**
d) Centre rod
- b) A conductor
d) None of these
- b) **Chemical effect of electricity**
d) Physical effect of electricity
- b) Insulator
d) Both a and b
- b) Poor conductor
d) None of this
- b) Clothes
d) **All of these**
- b) Good conductor
d) None
- b) **Electric current**
d) Electrolyte
- b) Chemical effect
d) All
- b) Magnetic effect
d) None of these
- b) Power
d) Energy
- b) Inductors
d) **Conductors**
428. Out of the following which is not a poor conductor?

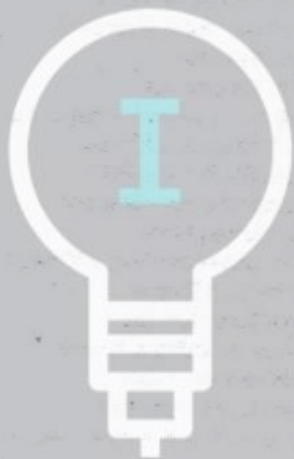
- a) Cast iron
c) Carbon
429. Out of the following which is an insulating material?
a) Copper
c) Silver
430. The property of a conductor due to which it passes current is called.....
a) Resistance
c) **Conductance**
431. Conductance is reciprocal of.....
a) **Resistance**
c) Reluctance
432. The resistance of a conductor varies inversely as.....
a) Length
c) Temperature
433. If electric wires and appliances are overheated due to high voltage of electric current they can
a) Catch fire
c) Freeze
434. An instrument which detects electric current is known as.....
a) Voltmeter
c) Wattmeter
435. With rise in temperature the resistance of semi-conductors.....
a) **Decreases**
c) First increases and then decreases
436. With rise in temperature the resistance of pure metals
a) **Increases**
c) First increases and then decreases
437. The S.I. unit of power is.....
a) Henry
c) **Watt**
- b) **Copper**
d) Tungsten
- b) Gold
d) **Paper**
- b) Reluctance
d) Inductance
- b) Inductance
d) Capacitance
- b) **Area of cross-section**
d) Resistivity
- b) Burn
d) **Both a and b**
- b) Rheostat
d) **Galvanometer**
- b) Increases
d) Remains constant
- b) Decreases
d) Remains constant
- b) Coulomb
d) Watt-hour

Exploring Space

Unit No: 12

438. **Telescope** is a device which is **used** to **see remote objects**.
439. The **first** known practically functioning telescope was invented in the **Netherlands** at the beginning of the **17th century**.
440. An **Optical telescope** gathers and focuses radiations mainly from the visible part of the electromagnetic spectrum. Optical telescopes increase the apparent angular size of distant object as their apparent brightness.
441. Optical telescopes are of **three kinds**.
442. **A) Refractor Telescope:** It uses lens
443. **B) Reflector Telescope:** It uses mirrors
444. **C) Catadioptric Telescope:** It uses mirror with a lens design.

- a) Galileo Galilei
c) Edward Jenner
465. Which instruments helps scientists to find out what stars are made of?
a) Lighter matter
c) Heat waves
466. What type of telescope is carried by Hubble space telescope?
a) **Refracting telescope**
c) Radio telescope
467. What was the name of the person to walk on the Moon?
a) Alan Shepard
c) John Glenn
- b) William Harvey
d) **Isaac Newton**
- b) **Sound wave**
d) Radio waves
- b) Reflecting telescope
d) Electronic telescope
- b) **Neil Armstrong**
d) Yuri Gagarin



Info

Hub HRMS SIS SED

General Science One Liners MCQ's

- Embolia is Hesitations in speech
- Study of Spiders is called Arachnology

In human body:

- Number of Bones 206
- Number of Muscles 639
- Number of Kidneys 2
- Number of Milk Teeth 20
- Number of Ribs 24 (12 pair)
- Number of Heart Chamber 4
- Largest artery Aorta
- Normal blood pressure 120/80mmHg
- Ph of Blood 7.4
- Number of vertebrae in the Spine 33
- Number of vertebrae in the Neck 7
- Number of Bones in Middle Ear 6
- Number of Bones in Face 14
- Number of Bones in Skull 22
- Number of Bones in Chest 25
- Number of Bones in Arms 6
- Number of Muscles in Human Arm 72
- Number of Pumps in Heart 2
- Biggest cell female Ovum
- Smallest cell male Sperm
- Smallest Bone Stapes
- First transplanted Organ Heart
- Average length of Small Intestine 7m
- Average length of Large Intestine 1.5m
- Average weight of new Born baby 2.6kg
- Pulse rate in One Minute 72 times
- Normal body temperature 37 C° (98.4 F°)
- Average Blood Volume 4 to 5 liters
- Life Span of RBC 120 days
- Life Span of WBC 10 to 15 days
- Pregnancy Period 280 days (40 week)
- Number of Bones in Human Foot 33
- Number of Bones in Each wrist 8
- Number of Bones in Hand 27
- Largest Endocrine gland Thyroid
- Largest Lymphatic Organ Spleen
- Largest part of Brain Cerebrum
- Largest & Strongest Bone Femur
- Smallest Muscle Stapedius (Middle Ear)
- Number of Chromosome 46 (23 pair)
- Number of Bones in new Born baby 306
- Viscosity of Blood 4.5 to 5.5
- Universal Donor Blood Group O
- Universal Recipient Blood Group AB
- Largest WBC Monocyte
- Smallest WBC Lymphocyte
- Increase RBC count called Polycythemia
- Blood Bank in the Body is Spleen
- Non Nucleated Blood cell is RBC
- RBC produced in the Bone Marrow
- River of Life is Called Blood
- Normal Blood Cholesterol level 250mg/dl
- Fluid part of Blood is Plasma
- Normal Blood Sugar 100mg/dl
- Vitamin K helps in clotting of blood?
- The pancreas secretes Insulin
- Tibia is a bone found in the Leg
- The largest part of the human brain is the Cerebrum
- Calcium phosphate is the main component of bones and teeth
- The main constituent of hemoglobin is Iron
- The main function of the kidney is to remove waste product from the body
- The function of hemoglobin is Transportation of oxygen
- Lachrymal glands secrete tears
- Liver is the largest gland in the human body
- Skin is the largest organ in the human body
- A person of blood groups O is called a universal donor
- Pituitary gland in the human body is called the master gland
- Carbohydrates have maximum calorific value
- Vitamin A promote healthy functioning of eyes in human beings

- The average heartbeat per minute in a normal man is 70
- A person with blood group AB can receive blood of any group
- Malaria is a disease which effects the Spleen
- Disease. Small pox is caused by virus?
- Myopia is a disease connected with Eyes
- Leukemia is a disease of the Blood
- Short-sightedness can be corrected by using Concave lens
- Trachoma is a disease of the Eyes
- Typhoid and cholera are typical examples of Water-borne disease
- Pyorrhoea is a disease of the Gums
- Lack of what causes diabetes Insulin.
- Appendix is appendix is a part of Large intestine
- Bronchitis is a disease of Respiratory tract
- ECG is used for the diagnosis of ailments of Heart
- Barium is used for X-ray of alimentary canal
- Insulin is injected into the intestines by Pancreas
- Lock Jaw, i.e., difficulty in opening the mouth is a symptom of Tetanus
- Ricketts is a disease of the Bones
- Pulmonary artery carries impure blood
- Lungs are situated in the Thoracic cavity
- Enzymes help in Digestion of food
- Food is normally digested in the Small intestine
- An object that reflects all the light looks white. Algae is responsible for the largest amount of oxygen of Earth
- Vitreous Humor, Sclera and Iris are parts of human organ Eye
- Metacarpal bones are located in hands of the human body
- Food is mainly digested in Small intestine
- A gene is a Unit of heredity
- Rusting of iron is a chemical reaction
- Echoes are produced due to Reflection of sound
- H_2SO_4 is an acid
- Famous physicist and electrical engineer Nikola Tesla invented Induction Motor, Tesla Coil & Remote Control
- Medulla Oblongata is a part of Brain
- Meteorology is a branch of science which includes study of Weather
- 1 mile = 5280 ft:
- The study of bees is called Apiculture
- Bacteria is responsible for Cough
- Bile is stored in Gall Bladder
- In eye donation Cornea is used
- 'Etymology' is a science of Origin and history of words
- 'Ornithology' is the scientific study of Birds
- Decibel is a unit used for intensity of sound
- The planet nearest to the sun is Mercury
- Alzheimer is Neurological Disease
- Nicotine chemical in tobacco causes a smoker to be addicted to smoking
- Blood leaves the heart through arteries. The main artery leaving the left ventricle is called Aorta
- A Hyperlink is a word phrase that, when clicked, displays another document
- An electronic path that sends signals from one part of the computer to another is called Bus
- Goitre is usually caused by deficiency of Iodine in the human body
- Skimmed milk is generally lowest in fat
- Vitamin D is essential for bone and teeth formation
- Femur is the longest bone in human body
- 'Horse Power' is standard unit of power equal to 746 watts
- Human heart comprises 4 chambers
- A Fuse wire (Fuse) is used to prevent damage due to unusually high voltage
- Helium gas was commonly used in airships
- Solar eclipse occurs when Moon comes between Sun and Earth
- The lens in the human eye is Convex Lens
- Blood cells are produced by bone-marrow in the human body.
- Velocity is measured by Speedometer
- Microphone converts phone to sound into Electrical energy
- Sound cannot travel through Vacuum
- Pasteurized milk is processed to kill Bacteria
- Dialysis used for Kidney
- Oxygen was discovered by Priestly
- Nearest planet to the sun is Mercury
- Safety pin was invented by Walter Hunt
- Optical fiber is used for communication
- An optical fiber or optical fibre is a flexible, transparent fiber made by drawing glass (silica) or plastic to a diameter slightly thicker than that of a human hair.
- The term PVC is widely used in plastics industry. PVC stands for Polyvinyl Chloride
- Amongst, Meat, Fish & Eggs not rich in protein is Potatoes
- Normal sunlight when passed through a prism, breaks into 7 colours
- Leukemia is a disease of the Blood

- Amongst visible colours Red has the longest wavelength
- Light travels in vacuum at the speed of 186282 miles per second
- Night blindness is caused by the lack of Vitamin A
- The amount of pressure in the arteries during the contraction of heart muscle is called Diastolic Blood Pressure
- In the Nuclear Fission process nucleus of an atom splits into lighter nuclei
- A quantity which does not change is called Constant
- following Super computer is used for weather forecasting
- Acid rain contains high levels of: Sulphuric Acid and Nitric Acid
- The uncharged particle in an atom is called Neutron
- Blood vessels Veins carry blood from the human body to the heart
- The part of the eye that allows us to focus on different things is known as the Lens
- Rickets in childhood occurs due to lack of Vitamin D
- Plants got their Nitrogen from Soil
- Hepatitis is a viral disease
- Mercury is the smallest planet in Solar System
- DNA is the abbreviation of Deoxyribonucleic Acid
- The chemical symbol of Iron is Fe
- Hydrogen is the lightest gas
- Acid rain is caused by chemical reaction of which compound Nitrogen Oxide
- Insomnia is a Sleep disorder
- Organic Chemistry is a branch of chemistry in which we study compounds of Carbon
- Car radiator is a component of every car which is used for Cooling Engine
- Einstein was a German physicist who gave the equation of Mass & Energy
- Theory of Relativity was pronounced by Einstein
- Barometer is used to measure Atmospheric Pressure
- A heart of frog has how many chambers 3
- Chloroform was discovered by James Simpson
- Calorie is a unit of Quantity of heat
- The Infrared radiation by sun are strongly absorbed by CO₂ and H₂O vapors
- Monitor is not an input device
- OS stands for Operating System
- One gram gold is equal to 1000 milligram
- Hypochondria is a condition in which a person is excessively and unduly worried about having a serious illness.
- Cells is the basic building block of human body
- Milk contains Lactose
- Mercury is called Metal
- "Ozone Depletion" is due to Overpopulation
- Best conductor of electricity is Silver
- The biggest source of energy and heat is Sun
- Six feet are in a fathom.
- Toenails part of the human body contains the most gold.
- Triskadecaphobia is the fear of Number 13
- Sulphuric Acid is used in car batteries.
- The Curies discovered radium
- Astronomy is the oldest known science.
- Zirconium is the last element alphabetically.
- The Dead Sea body of water is approximately nine times saltier than ocean water?
- SARS stands for Severe Acute Respiratory Syndrome
- Mars is named after the Roman god of war. Mars is called Red planet
- Mars is half the size of earth
- Jupiter is largest, with largest number of satellites, smallest day, with a red spot.
- Kidney produces urea in the human body
- Highest waterfall is Angel (Venezuela)
- Lowest body of water is Dead Sea.
- Atomic number were discovered by Mosley in 1913.
- Atomic Structure was studied by Bohr and Rutherford in 1913.
- After Al Beruni Circumference of the earth was calculated by Jean Picard.
- Current Electricity was invented by Volta in 1800, he belonged to Italy.
- Cause of yellow fever was discovered by Reed in 1900.
- Deuterium (Heavy Hydrogen) was discovered by H.C Urey in 1932.
- Discovery of Electron was made by J.J Thomson in 1897.
- Dynamite was made by Alfred Noble, he belonged to Sweden.
- Fundamental Laws of Electrical Attraction was made by Coulomb.
- In process of photosynthesis CO₂ gas is released
- Hydrogen was discovered by Cavendish in 1766.

- Incandescent bulb was made by Edison in 1860.
- Intelligence tests were made by Binet in 1905.
- Laughing gas is Nitrous oxide
- Otto Hahn invented the Atom Bomb.
- Wright Brothers invented Aero plane.
- Christian Barnard was pioneer in heart transplantation.
- Ramsay discovered inert gas.
- Aristotle was the first to classify animals into groups.
- Theophrastus is regarded as the father of botany.
- Hydrogen was discovered by Henry Cavendish.
- Thomson discovered electron.
- In 1803, the English Scientist John Dalton described the atom as the smallest unit of an element.
- In 1897 J.J Thomson discovered electron, negative charges.
- In 1911 Ernest Rutherford, a New Zealander living in Britain, carried out experiment with atomic particles.
- Scientist use enormous machine called particle accelerator to discover and find out about subatomic particles.
- Ernest Rutherford in 1908, with the equipment discovered the atomic nucleus.
- Hans Geiger invented the Geiger Counter used to measure radioactivity.
- In 1902 what did Mary Anderson invent? Windscreen Wipers
- The theory of inheritance of acquired characters was propounded by J.B. Lamarck
- Dr. James Watson discovered the structure of DNA in 1953.
- Structure of DNA was given by Watson and Crick.
- The scientist who designed the first internal combustion engine used to burn low grade fuel. Etienne Lenoir
- Anderson discovered positive electrons.
- Avogadro was an Italian scientist known for Avogadro's Hypothesis.
- Benjamin Franklin invented lightning conductor.
- Bessemer invented Steel smelting process.
- Speedometer is an instrument which indicates speed at which a vehicle is moving.
- One metric ton is equal to 1000 kg, or 2204 pounds.
- One square foot is equal to 144 sq. inches and 1 meter is equal to 3.28 foot.
- "Monometer" is an instrument for measuring Gaseous Pressure
- Altimeter: an apparatus used in aircraft for measuring altitudes
- The Eastern Mediterranean Island "Cyprus" is divided between Turkey and Greece.
- Ammeter: is used for to measure intensity of sound
- Anemometer: is an instrument for measuring the force and velocity of wind.
- 1 Inch is equal to 2.54 centimeters.
- Audiometer: an instrument to measure intensity of sound
- 'Claustrophobia' is defined as the fear of enclosed spaces
- "Brass" is an alloy of copper and zinc.
- "Bronze" is a metal alloy consisting primarily of copper, usually with tin as the main additive.
- Vitamin C (also called Ascorbic Acid) is a powerful antioxidant, and aids in the production of collagen, and stimulates the immune system. Vitamin C is essential for appetite.
- Normal arterial blood pH is 7.40, with a range of about 7.36-7.44
- The main constituent of Sui Gas is Methane.
- Xenophobia is the dislike or fear of people from other countries.
- Acrophobia is the fear of heights.
- "Photophobia" is the extreme sensitivity to light.
- Gunpowder is a mixture of sulphur, charcoal and potassium nitrate (nitre).
- Barograph: for continuous recording of atmospheric pressure.
- Barometer: is an apparatus used measuring the atmospheric pressure. Calorimeter: an instrument used for measuring quantities of heat.
- "Cataract" is the disease of Eye and also a huge water fall.
- Newton discovered that every action has an equal reaction.
- "Autopsy" is the Post-Mortem examination of a body.
- Penicillin is widely used as an antibiotic
- The air we inhale is mixture of gases.
- "Plutocracy" is form of government controlled by Wealthy Class.
- Which of the following gases in the mixture is highest in percentage? Nitrogen

- "Lexicography" is the branch of science which deals with the process of writing dictionaries.
- Drinker's apparatus: to help breathing in infantile paralysis.
- Dynamo is the origin of electricity in a Dynamo is the transformation of mechanical energy into electrical energy.
- Epidiascope is used for projecting films as well as images of opaque articles on a screen.
- Phonograph: is an instrument used for reproducing sound.
- Sound travels fastest in Glass.
- Pakistan launched its first space satellite Badr-1 on July 16, 1990.
- Richest source of Vitamin D is cod liver oil.
- Vitamins C is not stored in human body and lack of vitamin c create teeth disease.
- Vitamin K helps in blood clotting.
- Uranium resources found in Pakistan in D G Khan
- SIM stands for Subscriber Identity Module.
- Gestapo was the secret police organization; and BND is the secret agency of Germany.
- Rain Gauge: is an apparatus for recording of rainfall at a particular place.
- Radiometer: is an instrument for measuring the emission of radiant energy.
- Fire temple is the place of worship of which of the following regions? Zoroastrianism (Parsi Religion)
- Ecology deals with Relation between organisms and their environment
- If speed of rotation of the earth increases, weight of the body decreases
- Lack of vitamin B1 causes Beri Beri
- A Myologist studies what? Muscles
- Zirconium is the last element alphabetically?
- Astronomy is the oldest known science?
- Gamma rays are considered the death rays.
- Gamma rays travel with the velocity of light
- Gamma rays have maximum penetrating power
- Shortest wavelength among alpha, beta and gamma is of gamma rays
- Laser rays are used in micro surgery
- Alpha radiations produce burns on human body
- Hydrogen was invented by Henry Cavendish
- Cotton gin was invented by Eli Whitney.
- Human heart transplant by Bernard
- Vaccine (measles) was invented by Peebles
- Vaccine (polio) was invented by Salk
- Vaccine (rabies) by Louis Pasteur
- Vaccine (small pox) was invented by Edward Jenner
- Cause of Malaria was discovered by Ronald Ross
- Addison's disease caused Jane Austen's death?
- Ornithology is the science of birds
- Philology is the science of languages
- The Kiwi, national bird of New Zealand, can't fly.
- The turkey was named for what was wrongly thought to be its country of origin.
- Emus have double-plumed feathers, and they lay emerald/forest green eggs.
- Ostriches stick their heads in the sand to look for water.
- Galileo was first to discover rotation of earth
- Kohler and Milstein discovered monoclonal antibodies.
- Photography was invented by Mathew Barry
- Albert Sabin invented Polio vaccine (oral)
- X-ray machine was invented by James Clark
- Arthur Compton discovered x-rays and Cosmic rays.
- Electric motor was invented by Michael Faraday
- Electromagnet was invented by William Sturgeon
- Washing machine (electric) was invented by Alva Fisher
- Washing machine (manual) was invented by Hamilton E. Smith
- Bacteria were discovered by Louis Pasteur.
- Ramsay discovered inert gas.
- Proton was discovered by Goldstein
- Jonas Salk is credited with the development of polio vaccine?
- Christopher Cockerel invented what: Hovercraft
- The electric chair was invented by a dentist
- Atom Bomb (Uranium Fission) was invented by Otto Hahn in 1941.
- Diameter of a lens is called Aperture
- Angstrom is unit of Length & Becquerel is unit of Radioactivity
- Carcinophobia means Fear of cancer
- Pepri is the old name of Bin Qasim port
- Jehangir Nagar is the old name of Dhaka
- Khan Garh is the old name of Jaccobabad
- The rate of change of displacement is called

Velocity

- The diffraction of light was discovered by Maxwell
- The ability or capacity to do work is called Energy
- Energy possessed by a body due to its motion is called Kinetic Energy
- John Guttenberg invented printing press
- Energy in sun produced by hydrogen nuclei is the result of Fusion
- Main constituent of sun is H_2
- The distance travelled by light in one year is defined as Light year
- The Sun is made of gases mainly Hydrogen and Helium
- The outer surface temperature of the Sun is $6000^\circ C$
- In the core of the Sun Nuclear Fusion process is occurring all the times.
- During Solar eclipse the moon comes between the Earth and the Sun.
- During Lunar eclipse the Earth comes between the moon and the Sun.
- The greenish planet of solar system is Uranus
- Mars planet of solar system is red in colour
- Formation and change of one season to another is due to Earth Revolution
- The Sun appears to rise from the East and set into the West due to Rotation of Earth
- Formation of day and night is due to Rotation of Earth
- SIMM stands for Single Inline Memory Module
- The Foundation manages the assets made available through the will for the awarding of the Nobel Prize in Physics, Chemistry, Physiology or Medicine, Literature and Peace.
- The process of conversion of a material from the solid state directly to the gaseous state is called sublimation
- Light travels fastest in Vacuum. The speed of light in vacuum is almost 299,792,458 meters per second, which is 1.0003 times faster than light travelling in air. In different theories and equations of physics, the speed of light is represented by the symbol " c "
- Red Color has longest wavelength
- Aorta is an organ of circulatory system. Alessandro Volta discovered the Current Electricity.
- Convex lens is thicker in the middle.
- Concave lens is thinner in the middle.
- Deficiency of vitamin K causes a profuse flow of blood from wounds.
- Vitamin K causes the making of clotting on the wounds,
- This increase of white blood corpuscles causes leukemia.
- The principle of wireless telegraphy discovered by Guglielmo Marconi
- Pressure is measured by Pascal. & Current is measured by Volta.
- Sun is the central body in the solar system. All planets revolve around it due to its attractive forces.
- The planet which would be nearer to the sun, would be more attracted and hence it would gain maximum speed and velocity to complete its revolution. The fastest planet of the solar system is Mercury.
- The phenomenon in which the planet moves around its axis is called spin. Due to the spinning movement of planet the day and night occur.
- Jupiter is the fastest spinning planet in the solar system, which only takes 9 earth hours and 56 minutes to complete its one spin around its axis.
- Most abundant element in human body is Oxygen
- Mercury is also known as Quick Silver.
- Helium and neon called Noble Gases
- Pakistan is situated at Tropic of cancer
- Siachen glacier is located in Baltistan
- Blood Sugar is measured in mg/deciliter
- Blood pressure is measured in mmHg
- When ice melts, its density increases up to 4 degree centigrade (because water has maximum density at 4 degree centigrade)
- Pressure is represented on map by joining all plates having the same pressure by means of lines. These lines are called Isobars.
- Lemon contains vitamin C
- A color blind person fails to distinguish Red from green
- Bones of joints are held together by Tendons
- Which of the following vitamins is essential for proper bones formation? Vitamin D
- Insulin treatment is given to people suffering from Diabetes
- A patient is put to Dialysis, when he or she suffers from Kidney ailment
- Acquired Immune Deficiency Syndrome (AIDS) is infected by Virus
- Leprosy is caused by Bacteria

- The formation of Red Blood Corpuscles (RBC) takes place in Bone marrow
- Chemically an enzyme is a Protein
- The largest organ of human body is Liver
- An eye defect in which one cannot distinguish between vertical and horizontal lines is called Astigmatism
- Oxygen is transported to every cell of body through Red Blood Cells
- The ductless and secretory glands in the human body are known as Endocrine glands
- A universal donor has blood group O
- The human organ affected by malaria attack is Spleen
- A man suffering from the bleeding of gums is advised to take Citrus fruits
- The Red Blood Cells in a human body die after about 120 days
- The mammal which lays eggs is Duck-billed platypus
- A reptile with a four-chambered heart is Crocodile
- Bananas do not have seeds because their fruits develop without fertilization
- The plant which bears fruit only once in the life time is Banana
- Sex of a child is normally determined by the chromosome of Father only
- Fertilization means fusion of nuclei of male and female gametes
- The branch of Biology that deals with the study of the process of ageing is Herpetology
- Improvement of human race by genetic engineering is studied under Eugenics
- Whales breathe by Lungs
- Kangaroo is native animal of Australia
- Number of vertebrae in man is 33
- Food is stored as reserve fuel in Liver
- In lead pencil Graphite is used
- Helium, neon and argon are called Noble Gases
- Uranium radioactive element is used in making atomic bomb
- Metals are good conductors of electricity. Copper is used in making brass, bronze and German silver.
- Percentage of aluminum in earth's crust is 7%
- Hydrogen atom does not have a neutron
- The charge present on an electron is Negative
- The charge present on a proton is Positive
- Everything which has weight and occupies space is called Matter
- Isotopes of an element have same number of protons but different number of Neutrons
- Hydrogen was discovered by Henry Cavendish
- Carbon dioxide was discovered by Van Helmont
- The word hydrogen means Water producer
- Gypsum is used to treat sainity.
- The bond formed by mutual sharing of electrons of bonded atoms is called Covalent
- The chemical formula of silicon is SiO_2
- Limestone dolomite and magnetite are common minerals of Carbon
- Most abundant element in human body is Oxygen
- Symbol of sodium is Na
- Chemical formula of table salt is NaCl
- Fluorine is used to prevent tooth decay. S
- Symbol of Iron is Fe
- Gallium metal is having such a low melting point that it can melt in your hand
- Bromine (non-metal) is liquid at room temperature
- Oxygen is prepared on a large scale from Air
- Carbon dioxide is used as a fire extinguisher
- Graphite substance is used as a lubricant
- Burning of wax is a chemical change
- Nitrous oxide and Sulphur dioxide are responsible for acid rain
- In the manufacturing of Banaspati Ghee Hydrogen gas is used
- The chemical name of laughing gas is Nitrous oxide
- Hydrogen is the lightest element of the periodic table
- Titanium element is found on the surface of the moon
- Helium is used for respiration in deep water instead of Nitrogen because it is lighter than Nitrogen
- The mass of Neutron is approximately equal to the mass of a proton
- Carbon dioxide gas is used in soda water
- Graphite (form of Carbon) is good conductor?
- Propane is the main constituent of Liquid Petroleum Gas (LPG)
- An instrument used for measuring atmospheric pressure is called Barometer
- The branch of science which deals with the properties of matter and energy is called Physics
- Electromagnetic wave theory of light was

- proposed by Maxwell
- Natural radioactivity was discovered by Becquerel in 1896
 - The velocity of light was determined accurately by Michel Son
 - Second Law of thermodynamics was given by Kelvin
 - Neutron was discovered by Chadwick
 - Transistor was invented by Bardeen
 - The circumference of the earth was determined by Al-Beruni
 - Telephone was invented by Graham Bell
 - In SI Kilogram is a unit of Mass
 - SI unit of length is Metre & unit of force is Newton
 - Light year is a unit of Distance
 - Unit of work in SI units is Joule
 - Unit of Power in SI unit is Watt
 - The shortest distance between two points is called Displacement
 - The rate of change of displacement is called Velocity
 - The diffraction of light was discovered by Maxwell
 - Soap film in sunlight appears colored due to Interference
 - Water waves are the example of Transverse waves
 - Sound waves are the example of longitudinal waves
 - An average human ear can hear sound of frequency between 20 to 20,000 Hz
 - The radius of earth is 6.3×10^6 m
 - The volume of the earth is 1.08×10^{21} m³
 - The mean density of earth is 5.5 Kg/m³
 - The ability or capacity to do work is called Energy
 - Energy possessed by a body due to its motion is called Kinetic Energy
 - Wind flows from area of High pressure to low pressure
 - Hydrogen bomb is an example of nuclear fission
 - Atomic bomb is an example of Controlled nuclear fission
 - First atomic reactor was introduced by Enrico Fermi
 - The rate of change of angular momentum of a body is the applied torque
 - Lens which is thinner at the centre and thicker at the edge is called Concave Lens
 - A lens which is thicker at the centre and thinner at the edges is called Convex Lens
 - The diameter of a lens is called Aperture
 - Ohm is unit of Resistance & Calorie is unit of Heat
 - Dyne is unit of Force & Angstrom is unit of Length
 - Rainbow is produced by the Reflection of light through rain drop.
 - Light can pass through objects which are transparent
 - Voltage can be calculated by formula $V = IR$
 - Farad is the unit of capacitance
 - Magnetic field is produced when current passes through a wire.
 - Energy in sun produced by hydrogen nuclei is the result of Fusion
 - Iron metal is extracted from Hematite
 - The distance travelled by light in one year is defined as Light year
 - If a red rose is kept in a background of red light it will appear Red
 - A beam of white light passing through a prism scatters in seven colors
 - If there were no atmosphere, the color of sky would be Black
 - Sound waves cannot travel in Vacuum
 - During winter if we touch a piece of metal and a piece of wood lying in the garden, the metal seems much colder. This is because metal has high thermal conductivity
 - 'Mirage' occurs due to the refraction of light
 - Jupiter is the largest planet of our solar system.
 - The Jupiter is a ball of Gases
 - The Sun is a Star
 - The Sun is made of gases mainly Hydrogen and Helium
 - The surface temperature of the Sun is 6000°C
 - The first man to walk on the moon was Neil Armstrong
 - The atmosphere closest to the Earth is called Troposphere
 - Weather vane is used to detect Direction of Wind
 - Gales occur when wind moves at speed of 100 km/h
 - Small rocky bodies that orbit the Sun are called Asteroids
 - The Mars completes its rotation around its own axis in 24 hours
 - The Uranus completes its rotation around its own axis in 17.3 hours

- The Mercury completes its revolution around the Sun in 88 days
- A piece of land with water all around is called Island
- Constellation of seven stars is called Great Bear
- The greenish planet of solar system is Uranus
- Mars planet of solar system is red in color
- Formation and change of one season to another is due to Earth Revolution
- Days and nights are unequal due to Tilt of earth
- The Sun appears to rise from the East and set into the West due to Rotation of Earth
- The earliest and the simplest computing device was Abacus
- The transistor was invented in 1948
- The computers can be connected to telephone lines through Modems
- The set of binary instruction codes, which is directly understood by the CPU is called Machine Language
- In third generation computers integrated circuits were used instead of Transistors
- The life time project of Charles Babbage was to build a machine known as Analytical Engine
- ROM stands for Read Only Memory 8 bit data bus can transfer 1 byte
- Parallel port is used for connecting Printer
- The brain of the computer is CPU
- 2 bytes are equal to 16 bits
- Scanner is an input device
- In Microsoft Word the short key 'Ctrl + B' is used for making the selected text Bold
- Shortcut command used for printing a document is Ctrl + P
- Command used for single line spacing is Ctrl + 1
- The bar located at the top of window, containing the name of the application, current topics or current documents is called Title Bar
- When there is more information that cannot fit in a window at single time then a bar is displayed at the right of bottom borders called Scroll Bar
- The bar, which appears immediately below the title bar on which command are grouped together for manipulating information in the windows is called Menu Bar
- Which software controls the entire operation of a computer? System Software
- The minimum amount of RAM required for the installation of window 2000 is 32 MB
- Anesthesia refers to methods that cause a loss of sensation particularly the loss of pain.
- Removal of damaged or seriously diseased part of limb of body is called Amputation
- Acupuncture is a method of Chinese traditional healing involving the insertion of a fine needle beneath skin and moved by rotation to get relief of symptoms.
- Amnesia is condition of loss of memory partial or total.
- Arthritis is inflammation of joints or spine, cause pain and swelling.
- Athlete's foot is fungal infection of the skin, particular between the toes caused by ringworm.
- Atherosclerosis is fatty deposition to innerwalls of arteries.
- Bell's Palsy is paralysis of facial muscles caused by infection or inflammation.
- Botulism is food poisoning caused by anaerobic bacteria clostridium botulism.
- Radiography is technique of examining the body through x-rays.
- Systole is condition of contraction of heart muscles.
- Diastole is condition of relaxation of heart muscles.
- Haemophilia a hereditary disorder in which blood fails to clot.
- Gerontology is scientific study of ageing and diseases that affect the aged.
- Electroencephalograph is a technique that is used to record brain structure or activity.
- Diplopia is double vision caused by dysfunction in muscles that move the eyeball.
- The scientist who designed the first internal combustion engine used to burn low grade fuel. Etienne Lenoir
- The scientist who asserted the earth to be a huge magnet: Ben Franklin
- The scientist who asserted the earth to be a huge magnet: William Gilbert
- Edible part of tomato is whole fruit.
- One micron is equal to One-thousandth of a millimeter.
- Camera (photographic) has been invented by "Joseph N. Niepce" France in 1822.
- Sunlight is composed of seven colours
- Braille system is used for the education of Blind.
- Blue color has shortest wavelength Protein is

- a natural polymer
- Red light is most suitable for photosynthesis.
- Respiration means food oxidation and evolution of energy.
- The organisms which are the only living membrane of their group and link two major groups are called Living Fossil.
- Mammals are warm blooded.
- Trypanosome a parasite causing sleeping sickness.
- Half-time is a time of radioactive substance taken by that substance to decompose radioactivity to half of its weight.
- Structure of DNA was given by Watson and Crick.
- In Nuclear DNA is concentrated in chromatin.
- Light energy is stored in the form of chemical energy due to the activity of Chloroplast.
- Protoplasm is a colloidal solution.
- Voltammeter is an electrolytic cell for conducting electrolytic dissociation of electrolyte.
- Birds are warm blooded animals.
- Birds bones are hollow.
- Hydrometer measures relative density of liquids
- Hygrometer measures humidity in atmosphere
- Manometer measures pressure of gases
- Periscope is used for viewing objects above eye level
- The readings of a Fahrenheit and a Centigrade temperature is the same at -40° .
- Powder-type fire extinguisher is used for petroleum fire.
- India occupies first position in the world in the production of tea.
- Zero Rate Inflation obtains necessarily in a year where the annual rate of inflation is constant in every week of the year.
- G.J. Mendel is known as founder of genetics.
- Milk is an example of emulsion.
- The average salinity of sea water is 3.5%.
- Snake is a limbless reptile.
- Tape worm has no digestive system because it is a saprophyte.
- Energy value of food items is expressed in kilojoules or thousands of joules
- Virus means poison
- Silver metal has the highest electrical conductivity.
- Mohr's scale hardest substance is diamond and Talc is the softest
- Oxygen was discovered in 1774. In 1907 Electric Washing Machine was
- Tomas A Edison was American
- X-rays and Cosmic rays were discovered by Motorcycle was invented by Gottlieb
- Arthur Compton. Daimler in 1885, he belonged to Germany.
- Blood pressure was discovered by William Dynamo was invented by Faraday in the year of 1831.
- Loud speaker converts electrical energy into sound energy.
- The electrical device which transform voltage : transformer
- A nuclear reaction in which two or more than two lighter nuclear are fused together to form a relatively heavier one is nuclear fusion
- The clear sky looks blue because of dispersion of light
- Cable describes one tenth of a nautical mile-unit of sound named after- Alexander
- Electricity does not flow through a circuit by itself. It needs a 'push', or energy, to keep it moving. We call this energy the voltage of the circuit. Voltage is measured in volts (v).
- The thickness of silk is measured in what-Denier
- Ohm's law does not apply to
- Semiconductors and conductors when there is change in temperature.
- If the same note is played on a flute and a sitar, one can still distinguish between them because they differ in quality.
- A negatively charged glass rod has always less protons than electrons.
- The wavelength of the X-rays is of the order of 0.1 nanometer.
- Oil rises in a wick of oil lamp on account of a property of matter called Capillary Action
- When a person can see nearer objects but not the distant ones he is said to be suffering from nearSightedness (myopia)
- ATP is a molecule containing high energy bonds.
- Millions of asteroids orbit the sun in the asteroid belt between Mars and Jupiter Ceres is the largest asteroid
- Corona is the outer most halo of the Sun. Comet is made of ice and dust
- Edmond Halley was the first to calculate the

- path of a comet and predict when it would be seen again.
- The patterns in stars are called constellations.
 - In 1930, astronomers finally agreed how to divide the whole sky into 88 areas, which are called constellations.
 - Speed of light is 3,00,000 km/sec
 - Mars planet is named after the Roman god of war?
 - Galaxies are the families of stars.
 - About 80% of galaxies are elliptical and other are spiral
 - Elliptical galaxies contain very little gas and dust and hardly any new stars are born in them.
 - Spiral galaxies are disk shaped and usually have clouds of dust and gas where new stars are born.
 - Light travels at 3,00,000 km/s. the speed at which you can round the world seven times in very second.
 - Light takes 8 minutes to reach the earth from sun.
 - Two planet Earth's could fit side by side inside the Great Red Spot of Jupiter.
 - Ganymede is the largest moon in the solar system.
 - Taxidermy means stuffing dead animals
 - Acoustics is the science of sound
 - Cytology is the study of cell
 - Entomology is the study of insects.
 - Apiculture is science of bee keeping
 - Oncology is the study of cancer
 - Exobiology is the study of life in outer space
 - Numismatics is the study of coins
 - Eugenics is the study of altering humans by changing their genes or it refers to improvement of human race
 - Anthropology is the study of origin and physical and cultural development of mankind
 - Carpology is the study of fruits and seeds.
 - Pathology deals with diseases
 - 6 feet is equal to 1 fathom
 - A 100 watt bulb lights for 1 hour uses 100 watt hour of electricity
 - -273 degree centigrade is called absolute zero temperature.
 - Standard pressure is 760 mm or 14.71b/in2
Gross is equal to 12 dozens
 - Mach 2 is equal to 500 miles per hour
 - 1 nautical mile is equal to 1825 meters
 - Histology deals with organic tissues
 - Cryogenics deals with the production, control and application of low temperatures
 - Seismology is study of movements inside earth's crust
 - Ambidextrous is one who can write with both hands.
 - Astrophysics is a branch of astronomy which deals with the physical and chemical nature of heavenly bodies.
 - A etiology is the study of causes of disease.
 - Conchology is the study of shells.
 - Anthropology is the study of man.
 - Cartography is the art of making maps and charts.
 - Philately is hobby of stamp collecting.
 - The branch of zoology, which deals with the study of insects is called entomology
 - The production of generally identical reproduction is called as Cloning
 - Xylography is Wood Engraving
 - Paleontology is the science of history of life.
 - Meteorology is the study of study of weather.
 - Cryptography is the study which deals with the secret writing.
 - Hydroponics means cultivation of the plants without use of soil.
 - The time period of a pendulum on moon increases.
 - Clinical thermometer usually measures in Fahrenheit.
 - Tube light emits radiation even after it is disconnected. It is due to Fluorescence.
 - Shortsightedness can be corrected with the use of Concave.
 - Rectifier converts AC into DC
 - Atomic weight of chemical compounds is determined by Mass spectroscopy.
 - Drinker's apparatus is for measuring the amount of Alcohol in the blood.
 - Dewar's flask is called as thermos.
 - The conversion of gases into liquid under high pressure and low temperature is called regulation.
 - If a green leaf is seen in a red light its color will be black.
 - Emerge of VIBGYOR from one side of the prism is due to refraction and dispersion of light.
 - Oxidation is the process in which electron is lost.
 - Half-time is a time of radioactive substance taken by that substance to decompose radioactivity to half of its weight.

- Light energy is stored in the form of chemical energy due to the activity of Chloroplast.
- Sunlight is composed of seven colours
- Oil rises in a wick of oil lamp on account of a property of matter called Capillary Action
- Fata Morgana is a Type of Mirage
- Freon is trademark for any of a number of chemical compounds containing fluorine, and often chlorine or bromine. as solvents, as aerosol propellants, in refrigeration.
- Freon is commonly used in refrigerator.
- Light travels fastest in vacuum
- Asteroids are small planets revolving round the sun
- Our galaxy is spiral known as Milky Way
- Super Nova is a dying star
- Nearest star to our sun is Alpha Centauri
- A collection of galaxies is called cluster
- Moon's 59% surface is visible from earth
- Mass of moon is 1/8th to that of the earth
- Moon has no atmosphere
- Sun is closer to earth in January
- Sun has 27 day rotation period
- Moon's rotation period is equal to the Earth's
- Rotation period of earth is 23hrs, 56min, 4sec
- Earth rotates around on axis pointing towards the Polar Star
- Equinox means equal days and nights Sun's energy is called Insulation
- Mycology is the study of fungus and fungi diseases.
- Numismatics is the study of coins.
- Petrology is the study of rocks in the earth's crust.
- Agronomy is the science of soil management.
- Penology is the study, theory and practice of prison management & criminal rehabilitation.
- a philologist studies Languages
- Chemical union of two or more molecules of the compound to form larger molecules is called Polymerization.
- A herbivore eats Plants
- Man eat both plants and animals is called Omnivore
- Pepsin produced in stomach digests the Proteins
- Blood sugar level is controlled by hormone called Insulin
- Darwin gave the theory of evolution
- Polio is caused by Virus
- Natural radioactivity was discovered by Becquerel in 1896
- X-rays were discovered by Roentgen
- Second Law of thermodynamics was given by Kelvin
- Neutron was discovered by Chadwick
- First human in space is Yuri Gagarin 1961 of USSR
- First space scientist was Henry Cavendish
- Earth Circumference was determined first time most correctly by Al-Beruni,
- Telephone was invented by Graham Bell
- A universal donor's blood group is O
- The mammal which lays eggs is Duck-billed platypus
- Largest sea bird is Albatross.
- Copper is used in making brass, bronze and German silver.
- The charge on an electron is Negative and charge on a proton is Positive
- Fluorine is used to prevent tooth decay.
- Hydrogen is the lightest element of the periodic table
- The Asteroid Belt is found between which of the following planets? Mars and Jupiter
- The visible part of the Sun is called Photosphere
- Ibn baitar was a Muslim Botanist
- Kitab al Manazar on optical works was written by Ibn al Haitham
- Petroleum is the most traded product in the world
- Total planets in solar system are 8
- Outer surface of sun is called photosphere
- Sun has 90% hydrogen, 8% helium and 2% other elements.
- Temperature at surface of sun is 6000K and at its center 20 million K
- Venus reflects highest percentage of light
- Lightest gas is hydrogen.
- Longest glacier is Lambert (Antarctica).
- Largest gorge is Grand Canyon. Largest Island is Greenland.
- Largest mammal is Blue whale.
- Highest melting point is of Tungsten, 3410°C.
- Venus is called Morning star.
- Venus is the only planet that rotates clockwise
- 1480,00,000 km is the distance from sun to earth.
- Temperature of Sun is 6000 degree C.
- Planet with rings is Saturn
- Rhea is the fifth natural satellite of Saturn.
- The only planet which rotates on its axis from East to West is Uranus

- Uranus is called lopsided planet
- Uranus contain atmosphere of Hydrogen and Helium
- Period of rotation of earth on axis is 1 day or 23 hrs, 56 minutes & 4 seconds.
- The largest tides of the world occur in Bay of Fundy (Canada).
- Sudan is the second largest country in Africa area wise.
- Maximum Quantities of diamonds are found in Africa.
- Light is the fastest thing in the universe. It travels at a phenomenal speed of 187,000 miles per second.
- The largest tides of the world occur in Bay of Fundy (Canada).
- Takla Makan desert is in China in Asia.
- Period of revolution of Earth around Sun is 366 days, 6 hrs, 9 minutes & 10 seconds.
- Rings of Saturn were discovered by Galileo in 1610
- Titan, the largest moon in solar system is of Saturn.
- Triton is a satellite of Neptune
- Planet referred as Evening Star is Venus
- Kanpur Mosque tragedy had taken place in 1913
- Largest coral formation is The Great Barrier Reef (Australia).
- Highest desert is Atacama (Chile).
- Biggest flower is Rafflesia (Java, Indonesia).
- Reko Dik located in Balochistan
- Gypsum is used in cement and plaster of Paris
- Astronomy is the oldest known science
- Zirconium is the last element alphabetically
- 'Uranium' is extracted in Pakistan from area of Dera Gazi Khan
- Day and Night are equal at the Equator
- Louis Braille is the inventor of a system of writing and printing for the blind
- Bird that never makes its nest is Cuckoo.
- Wingless bird is Kiwi.
- Study of blood is called Hematology
- Nicolas Copernicus is known as the 'Father of Modern Astronomy'?
- The light coming from stars give the idea of their temperature.
- A light year is equal to 9.46 trillion km
- Mercury is nearest to the sun, smallest and fastest planet, with shortest rotation time
- Venus is the brightest, hottest, closest to earth and earth's twin in size and mass, has largest quantity of CO₂
- Earth is most dense, watery, bios planet. Sextant instrument is used for measuring the altitude of a celestial body
- Fundamental Laws of Electrical Attraction was made by Coulomb.
- Hydrogen was discovered by Cavendish in 1766.
- Incandescent bulb was made by Edison in 1860.
- Intelligence tests were made by Binet in 1905.
- Laughing gas is Nitrous oxide
- Otto Hahn invented the Atom Bomb.
- Wright Brothers invented Aero plane.
- Christian Barnard was pioneer in heart transplantation.
- Ramsay discovered inert gas.
- Aristotle was the first to classify animals into groups.
- Theophrastus is regarded as the father of botany.
- Hydrogen was discovered by Henry Cavendish.
- Thomson discovered electron.
- In 1803, the English Scientist John Dalton described the atom as the smallest unit of an element.
- In 1897 J.J. Thomson discovered electron, negative charges.
- In 1911 Ernest Rutherford, a New Zealander living in Britain, carried out experiment with atomic particles.
- Scientist use enormous machine called particle accelerator to discover and find out about subatomic particles.
- Ernest Rutherford in 1908, with the equipment discovered the atomic nucleus.
- Hans Geiger invented the Geiger Counter used to measure radioactivity.
- In 1902 what did Mary Anderson invent? Windscreen Wipers
- The theory of inheritance of acquired characters was propounded by J.B. Lamarck
- Dr. James Watson discovered the structure of DNA in 1953.
- Structure of DNA was given by Watson and Crick.
- The scientist who designed the first internal combustion engine used to burn low grade fuel. Etienne Lenoir
- Anderson discovered positive electrons.

- Avogadro was an Italian scientist known for Avogadro's Hypothesis.
- Benjamin Franklin invented lightning conductor.
- Bessemer invented Steel smelting process.
- The study of heavenly bodies is known as Astronomy
- Supernova is a stellar explosion, which occurs when the nuclear fuel of a massive star gets exhausted causing the core of the star to collapse and releasing a vast amount of energy, which blasts away the outer parts of the star and leaves behind a neutron star or a black hole. This explosion can outshine a galaxy of billions of stars.
- The lightest metal is Lithium (Under low pressure it will be lithium, under very high pressure it is hydrogen)
- The most important ore of aluminum is Bauxite is the principal ore of aluminum.
- The element present in the largest amount in rocks and minerals is Silica
- An alloy used in making heating elements for electric heating devices is Nichrome
- Diamond is an allotropic form of Carbon
- The element common to all acids is Hydrogen
- Gobar gas contains mainly Methane The most malleable metal is Gold
- Water has max density at 4°C
- Non stick cooking utensils are coated with Teflon
- A farewell to Arms is written by Hemingway
- Pride and Prejudice is written by Jane Austin
- Preparing the 21st century is written by Tom Dickson
- Algebra, Trigonometry and Calculus are studies which originated in India.
- Quadratic equations were used by Sridharacharya in the 11th century.
- Dog Star is the common name for the star Sirius
- Scientists have discovered human footprints in England that are at least 800,000 years old - the most ancient found outside Africa, and the earliest evidence of human life in Northern Europe in January 2014.
- Sun is 400 times larger than our moon.
- Hummingbird has legs but can't walk
- 1 metric ton is equal to 1000 kg
- Corona is the outer most part of the Sun.
- Mercury and Venus are without Satellites.
- A 'shooting star' is a meteor.
- The pulsating universe theory explains the evolution of universe.
- Bird largest in size is Ostrich
- Dengue is also known as Breakbone fever
- Only planet whose day is longer than its year is Venus
- Brightest visible star is Sirius
- Atmosphere of sun has 3 layers
- In 28 days moon returns to the same position in its orbit
- Earth's surface temperature has increase mainly because of higher level of CO2 concentration
- Electrical Motor instrument converted electrical energy into mechanical energy?
- Loudspeaker instrument converted electrical energy into sound energy?
- Microphone instrument converted sound energy into electrical energy?
- Helium and neon are called Noble Gases
- Circulation of blood was described by a Muslim scientist name Abn e Nafis
- Al-Khwarizimi was first person who used zero.
- English Channel separates England from France.
- Gulf of Sidra is in Libya.
- The printing press was invented by Johannes Gutenberg
- Norman Borlaug was Agricultural Scientist who developed high yielding varieties of wheat and got Peace Nobel Prize
- Father of Computer is Charles Babbage
- Telescope was invented by Galileo
- Penicillin was discovered by Alexander Fleming
- Force is measured in Newton (SI), Dyne
- Hertz and Angstrom are units of frequency Units of work and energy are Joule and Erg Unit is density is kg/m³
- Unit of power is watt, BTU (Board of Trade Unit)
- Unit of electric charge is Coulomb Unit of voltage is volt
- Unit of electric resistance is ohm Unit of capacitance is Farad
- Unit of magnetic flux is Weber, Tesla Unit of radio activity is Becquerel
- Unit of crude oil is Barrel
- Unit of volume of water is cusec, cubic/sec
- Unit of admittance is Mho
- Unit of viscosity is Poise

- Unit of flight speed is Mach 1
- Unit of wave length of light is Angstrom Unit of energy is Electron volt
- Unit of brightness is Lambert
- Unit of luminous flux is Lumen
- Unit of magnetic pole strength is Weber
- Unit of RAD (Radiation Absorbed Dose) is Gray
- Unit of Electric Current is Ampere Unit of inductance is Henry
- Tesla is unit of magnetic flux density
- Rutherford is unit of rate of decay of radioactive material
- Faraday is unit of electric charge
- Angstrom is unit of length, used especially to specify radiation wavelengths
- Parsec is unit of astronomical length
- Degree is unit of measurement of an angle Dyne is a unit of Force.
- SI unit of pressure is Pascal.
- Curie is a unit of radioactivity Pascal Sound Pressure
- Curie is a unit of Intensity of radioactivity Angstrom Unit of length
- Light year is the distance light travels in a year
- Horse power Unit of Power Paris lies on Seine.
- When light waves travel from air to glass the wavelength and velocity variables are affected.
- Electrical lines of forces are imaginary.
- 1 horse power is 746 watts
- 1 horse power work is equal to lifting 550 lbs of weight to one foot for one second
- 1 calorie is equal to 4.2 Joules
- 1 barrel is equal to 159 liters
- Ozone is measured in percent age.
- An object traveling at Mach 2 is traveling approximately at 500 mph
- Alcohol strength is measured on the Gay-Lussac scale
- Chronometer is used to measure time
- Anemometer is used to measure Wind Speed
- One million cycles per second is called Megahertz.
- 0.200 grams are equal to one carat.
- Voltammeter is an electrolytic cell for conducting electrolytic dissociation of electrolyte.
- 8 furlongs make one mile.
- One micron is equal to One-thousandth of a millimeter.
- 2.47105 acres is equal to what SI unit- Hectare
- Unit of electromotive force in Volt Power is measured in Watts (w)
- Vitamin E is necessary for iron utilization;
- Vitamin E is for reproduction.
- Vitamin A is found in Dairy products
- Deficiency of Vitamin A causes Night blindness.
- Too much presence of the Potassium salt in human blood increase the risk of heart attack.
- The lack of calcium in the diet causes Rickets
- Celluloses are carbohydrates. Milk contains lactose.
- Vitamin C is also called Skin food
- Vitamin C can easily be lost in cooking and food storage
- Vitamin D is essential for calcium metabolism.
- Vitamin C hastens healing of wounds
- Vitamin capable of formation of blood is B12
- Rich source of Vitamin A is, eggs
- Deficiency of Calcium leads to rickets
- Vitamin B1 is available in yeast.
- Scurvy, arising due to deficiency of vitamin C, it is related to Gastro-intestinal disorder.
- Deficiency of vitamin A causes dryness of skin and night blindness
- Skin food is Vitamin C
- Vitamin C is also called Ascorbic Acid it prevents scurvy
- Vitamin C is also necessary for utilization of iron
- The food which contains largest amount of Vitamin C is tomato
- Vitamin E helps in fertility process
- Vitamin B helps maintain normal appetite and good digestion
- Protein found in milk is Casein, in beans is Legumes, in meat is myosin and in eggs is albumin
- Water soluble vitamin are B and C and all other are fat soluble
- Vitamin A is stored as Ester in liver
- Vitamin A is found in carotene bearing plants
- Vitamin E promotes oxygenation and acts as anti-aging
- Vitamin E is called anti-aging agent
- Sodium is necessary of nervous system.
- Vitamin D is essential for calcium metabolism
- Vitamin C cannot be stored in human body.
- Ground nut has maximum protein

- Digestion of fat in intestine is aided by Emulsification
- Hair, finger nails, hoofs, etc are all made of protein
- Milk contains 80% water.
- Milk is a complete food.
- Cheese contains vitamin D.
- Deficiency of Thiamine causes Beri Beri.
- Glucose is the source of energy for human brain.
- Major component of honey is Glucose
- Three main food nutrients are carbohydrates, protein and fats. Other are vitamins and minerals
- Meat is rich in iron we need to make blood cells
- Eating of coconut increases man's mental faculties
- Food poisoning can result from the eating of too much toadstools.
- Vitamin c is also known as Ascorbic Acid.
- Cell uloses are carbohydrates.
- Milk contains lactose
- Ascorbic acid is essential for the formation of bones and teeth.
- Citric acid is a good substitution for ascorbic acid in our nutrition.
- A guava contains more vitamin C than an orange
- The process by which plants take food is photosynthesis
- Reduction is the removal of oxygen atoms
- Oxidation is the combination of oxygen or removal of hydrogen
- Horticulture is the Cultivation of flowers, fruits and vegetable
- If temperature rises gradually up to 40 deg C, the rate of photosynthesis may stop altogether
- Carbon dioxide we release comes from food we eat
- Mudskipper is the only fish that lives largely on land rather than in the water
- Tears are produced by lachrymal glands
- Stephenson is called Father of Steam Locomotive?
- Eudid is known as the 'Father of Geometry'?
- Ernest Rutherford, a New Zealander, in 1908 discovered Atomic Nucleus
- Speed of sound is faster in hot air than in cold air
- Sound travels faster in moist air than in dry air
- Sound travels more rapidly in solids Maximum limit of sound beyond which a man can become deaf is 129 decibel
- Echo can only be produces when the distance of the obstacle is at least 17meters
- When we hear a sound, its impressions remain in our ear for 1/10th of a second
- Image persists for about 1/10th of second in our eye for creating a persistence of vision,
- pictures. are projected at the rate of 10 or more/sec
- Videotape used in camcorders to record audio and video signal employ fine grains of iron oxide.
- The laws of reflection were first discovered by al Hazen
- 0.200 grams are equal to one carat.
- One million cycles per second is called Megahertz.
- US inventor Samuel More developed the system of dots and dashes of telegraph that was known as Morse Code
- Scientist now think that protons and Neutrons are themselves made of still smaller particles called quarks.
- Derailleur gears are used in Bicycles.
- Cantilever brake used in Bicycle.
- Speed of light 300,000 kilometers per second.
- Centigrade and Celsius temperatures are same below freezing point.
- Manometer is used to measure pressure?
- The velocity of light was first measured by Olaf Roemer
- The first European scientist who refuted the belief that the earth was the centre of the universe was Copernicus.
- Mobile phones transmit message using radio-type waves called microwaves
- Super conductors are also strong diamagnetic, this means they strongly repel magnets.
- Some of the chemicals from the recycle of old cells are used by liver to make bile which is stored in gall bladder.
- Plastic is lighter than gold.
- Lasers are a special source of light called coherent light this means all the light waves are in step with each other and travel in same direction
- Laser produce light of one particular wavelength and it is s single, pure color.
- The first hologram was made in 1962
- Laser stands for Light Amplification by

- Stimulated Emission of Radiation
- Quartz-halogen bulbs are used in overhead projectors and spotlights
 - Helium is used to fill airships and balloons
 - Helium is used to pressurize hydrogen fuel in rockets and the air in diver's air tanks
 - noble gases are used in lighting.
 - The noble gases have very low boiling points.
 - Liquid helium is the coldest substance.
 - A gas only becomes liquid at -268.9 degree Centigrade
 - Combustion is a kind of oxidation reaction.
 - At room temperature the particles in air travel at around 1800 km/h the same speed as a bullet fires from a rifle.
 - Cardiogram a medical instrument used for tracing the movements of the heart.
 - Cardiograph is a medical instrument for tracing heart movements.
 - Chronometer is an instrument kept on board the ships for measuring accurate time.
 - Compass needle for knowing approximately the North-South direction at a place.
 - Gyroscope is an instrument used to illustrate dynamics of rotating bodies. It is a type of spinning wheel fixed to the axle.
 - Gyroscope is an instrument used to illustrate dynamics of rotating bodies. It is a type of spinning wheel fixed to the axle.
 - Hydrometer is an instrument used for measuring the specific gravity of liquids.
 - Hydrophone is an instrument used for recording sound under water.
 - Hygrometer is an instrument used for measuring humidity in air.
 - Manometer for determining the pressure of a gas.
 - Micrometer is an instrument used for converting sound i.e., fraction of the lowest division of a given scale.
 - Microphone is an instrument used for converting sound waves into electrical vibrations.
 - Microscope is an instrument which is used for magnifying minute objects by a lens system.
 - Microtome is used for cutting an object into thin parts for microscopic inspection.
 - Odometer is an instrument by virtue of which the distance covered by wheeled vehicles is recorded.
 - 1 metric ton is equal to 1000 kg
 - Corona is the outer most part of the Sun.
 - Mercury and Venus are without Satellites.
 - A 'shooting star' is a meteor.
 - The pulsating universe theory explains the evolution of universe.
 - Temperature of Sun is 6000 degree C.
 - Planet with rings is Saturn
 - Helium and neon called Noble Gases
 - The printing press was invented by Johannes Gutenberg
 - $1480,00,000$ km is the distance from sun to earth.
 - Only planet whose day is longer than its year is Venus
 - Brightest visible star is Sirius
 - Atmosphere of sun has 3 layers
 - In 28 days moon returns to the same position in its orbit
 - Earth's surface temperature has increase mainly because of higher level of CO_2 concentration
 - Al-Khwarizimi was first person who used zero.
 - Murphy's Law, briefly is "Everything that could go would do so"
 - First fully sequenced human genome was completed in April 2003
 - The most abundant mineral in the human body is Calcium
 - Study of blood is called Hematology
 - Nicolas Copernicus is known as the 'Father of Modern Astronomy'.
 - A light year is equal to 9.46 trillion km
 - Mercury is nearest to the sun, smallest and fastest planet, with shortest rotation time
 - Venus is the brightest, hottest, closest to earth and earth's twin in size and mass, has largest quantity of CO_2
 - Earth is most dense, watery, bios planet. Which instrument is used for measuring the altitude of a celestial body. Sextant
 - Study of heredity is called Genetics
 - Study of muscles is called Myology
 - Study of birds is called Ornithology
 - Telephone was invented by Graham Bell
 - The mammal which lays eggs is Duck-billed platypus
 - Natural radioactivity was discovered by Becquerel in 1896
 - X-rays were discovered by Roentgen
 - Second Law of thermodynamics was given by Kelvin
 - Neutron was discovered by Chadwick
 - In human eye image is formed at Retina
 - Leprosy is caused by Bacteria
 - An instrument used for measuring atmospheric pressure is called Barometer
 - Electromagnetic wave theory of light was

proposed by Maxwell

- The Asteroid Belt is found between which of the following planets. Mars and Jupiter
- The visible part of the Sun is called Photosphere
- Law of gravity is given by Isaac Newton
- Lunar eclipse occurs at full moon.
- Outer surface of sun is called photosphere
- Sun has 90% hydrogen, 8% helium and 2% other elements.
- Temperature at surface of sun is 6000K and at its center 20 million K
- Venus reflects highest percentage of light
- Lightest gas is hydrogen.
- Planet referred as Evening Star is Venus
- Kanpur Mosque tragedy had taken place in 1913
- Venus is called Morning star.
- Rhea is the fifth natural satellite of Saturn.
- The only planet which rotates on its axis from East to West is Uranus
- Uranus is called lopsided planet
- Uranus contain atmosphere of Hydrogen and Helium
- Period of rotation of earth on axis is 1 day or 23 hrs, 56 minutes & 4 seconds.
- Light is the fastest thing in the universe. It travels at a phenomenal speed of 187,000 miles per second.
- Rings of Saturn were discovered by Galileo in 1610
- Titan, the largest moon in solar system is of Saturn.
- Triton is a satellite of Neptune
- Highest melting point is of Tungsten, 3410°C.
- Period of revolution of Earth around Sun is 365 days, 6 hrs, 9 minutes & 10 seconds.
- Sun is 400 times larger than our moon.
- Solar System was discovered by Copernicus in 1540, he belonged to Poland.
- Artificial radioactivity was discovered by Madam Joliet and Irene Curie in 1934.
- The cornea is the only living tissue in the human body that does not contain any blood vessels.
- The woodchuck is the alternative name for Groundhog animal.
- Kangaroo animal is the biggest of the marsupials.
- Beri-Beri is the deficiency disease caused by the vitamin B1
- "Plague" is a disease, which spreads by rat.
- Dry ice is a Solid Carbon Dioxide. Diamond is a form of Carbon.
- The normal pulse beat of a human body is between 72-80.
- "Psoriasis" is a common skin condition that causes skin redness and irritation.
- "Carbon Dioxide" gas is used to extinguish fire.
- Light year is a unit of distance. Jaffna is situated in Sri Lanka.
- Jupiter is the Planet with the maximum number of moons.
- Microphone is used to convert sound waves into electrical energy
- Penicillin is widely used as an antibiotic
- The air we inhale is mixture of gases.
- Nitrogen in the mixture is highest in percentage
- Steel is more elastic than Rubber because ratio strain is more of stress to
- The chief constituent of gobar gas is methane
- ORBIS is Mobile Eye Hospital
- The life history of human malaria parasite in Anopheles was first described by Ronald Ross
- The distance between the earth and the sun is smallest in the month of January
- Sigmund Freud is a psychiatrist, who belonged to Austria
- Gypsum is used in cement industry and plaster of Paris
- Radio carbon dating process is used to find the age of Fossils.
- Fish is the best source of protein.
- Most commonly used bleaching agent is chlorine
- Lime is sometimes applied to soil in order to increase the alkalinity of the soil
- The frequency of Radio waves is the highest
- Atmospheric pressure at sea level is 760 mm
- Temperature decreases as height increases.
- High tides occur when the sun and the moon are in a straight line on the opposite sides of the earth.
- All rocks may be classified into three major groups, such as Igneous, Sedimentary and Metamorphic.
- Venus is nearest to the earth.
- Equatorial regions are regions of permanent low pressure.
- The revolution of the earth round the sun causes change of seasons.
- Condensation of water vapors in the atmosphere on particles of dust leads to the formation of Fog.
- Earth takes 4 minutes to cover one degree of latitude.
- Nimbus is a class of cloud means "a

raincloud".

- Maximum wind speeds, pressure deficit and radius of the eye are the factors contributing towards the severity of the cyclone.
- Biosphere is the part of the earth's Crust water and atmosphere where plants and animals can subsist.
- Mercury is the fastest planet.
- Alexander Fleming was the Scottish bacteriologist who discovered penicillin in 1928
- Alexander Graham Bell was the Scottish-American scientist who invented telephone in 1876
- Albert Einstein made the revolutionary discovery of the Theory of Relativity in 1905, which established his reputation among the physicists of Europe.
- Electric Dynamo' was invented by Andrea Marie Amperes
- 'Bicycle' was invented by Macmillan 'Sewing machine' was invented by Elias Howe
- Pin-kellog invented 'Loudspeaker' G. Daimler invented 'Motor Cycle' Gutenberg invented 'Printing Press' John L. Baird invented 'Television'
- Roger Bacon invented 'magnifying glass and spectacles'
- Miner's Safety Lamp was invented by Sir Humphry Davy.
- Fahrenheit was the inventor of 'mercury thermometer'
- John Ericsson invented Screw Propeller
- Albert Einstein presented 'theory of relativity'
- Insulin was invented by F. Banting.
- Torricelli is famous due to his invention of Barometer
- George Westinghouse introduced compressed air brake
- Mr. Sperry invented Gyrocompass
- Chloroform was first discovered by James Simpson
- Roentgen discovered 'X-rays'
- Steam Turbine' was introduced by Sir C.A. Parsons
- Dr. Alfred Bernhard Nobel discovered Dynamite
- 'Law of gravitation' was introduced by Sir Isaac Newton
- Samuel Pier Point Langley invented Aeroplane
- 'Rabies preventive vaccine' was discovered by Louis Pasteur
- John Napier is famous for Logarithms
- 'Hot air balloon' was made by Montgolfier
- 'Vaccination for smallpox' was discovered by

Jenner Christopher America

- Hahnmann was the founder of Homeopathy
- Mr. Gatting invented Machine Gun
- Burroughs invented 'adding machine'
- Sikorsky invented 'helicopter'
- Priestley Joseph discovered 'Oxygen' Taylor invented 'Radar'
- Poulsen invented 'Tape Recorder'.
- Stanley William invented 'Transformer'. W. Shockley invented 'Transistor'.
- Homo sapiens is the scientific name of man
- Polio, AIDS and Measles are caused by Virus
- T.B., whooping cough and diphtheria are caused by Bacteria
- In making of butter, cheese and yogurt we use Bacteria
- Dead bodies of organisms are broken down into simpler molecules by natural decomposers called Bacteria and Fungi
- Leeuwenhoek discovered bacteria in 1892
- Lack of vitamin B can cause Beri Beri
- Goiter is caused by deficiency of Iodine
- Scientific name of Vitamin C is Riboflavin
- Fruit is formed from Ovary
- Animals that feed on plants are called Herbivores
- Man eat both plants and animals so called Omnivore
- The type of environment an organism lives in is called Habitat
- The enzymes that digest carbohydrates are called Amylase
- Pepsin produced in stomach digests the Proteins
- Lipase is fat digesting enzyme that hydrolyses a small percentage of fats into fatty acids and Glycerol
- Bile is secreted by Liver
- Blood sugar level is controlled by hormone called Insulin
- Duodenum is a part of Small Intestine
- The right atrium of heart receives deoxygenated blood from the body via Vena Cava
- DNA double helix model was given by Watson and Crick
- Darwin gave the theory of evolution
- Adrenaline hormone is secreted by Adrenal gland
- Pituitary glands are located on Brain Polio is caused by Virus
- Water transport in plants occur through Xylem
- As a result of meiosis number of chromosome reduces to half
- Post mortem examination of organ or tissue

- of a dead body is called Autopsy
- Malaria is caused by Plasmodium
- Penicillin was discovered by Alexander Fleming
- RNA Stands for Ribonucleic Acid
- Rise of blood sugar level above its normal level is called Hyper Glycaemia
- In human eye image is formed at Retina
- Deficiency of iron can cause anemia
- Short sighted ness can be corrected by use of Convex lenses.
- A kind of mental disorder in which a patient becomes victim of sound and visionary hallucination is called Schizophrenia
- Use of Boron and Zink can improve cotton yield.
- Neptune is the coldest and slowest planet
- Sun light takes 8.3 min to reach earth or 510 seconds
- Father of Nuclear physics is Emest
- Father of Medicine is Hippocrates
- Father of Modern physics is Galileo Galilei
- Hygrometer is instrument used for measuring humidity of air.
- Clinical thermometer usually measures in Fahrenheit.
- Ammeter is use for measuring current strength
- The maximum limit of sound beyond which a person can become deaf is 129 lbs.
- Charles K Rhodes developed an X-Ray emitting laser in 1990.
- Sonmeter is an instrument used to study the behavior of vibrating string.
- Atmospheric pressure at sea level is 760mm Hg
- Deficiency of Vitamin C causes Scurvy.
- Diamond is the hardest mineral.
- The average thickness of the earth's crust is 32 km.
- Galvanometer: an instrument for measuring currents of small magnitude.
- Hydrometer is used for specific gravity of liquid.
- Earth revolves around the sun from West to east
- A light year is equal to 9.46 trillion kilometers.
- Polio is caused by Virus
- Penicillin was discovered by Alexander Flaming
- Copper is used in making brass, bronze and German silver.
- Composition of bronze is Copper and Tin
- An instrument used for measuring atmospheric pressure is called Barometer
- Electromagnetic wave theory of light was proposed by Maxwell
- Natural radioactivity was discovered by Becquerel in 1896
- Neutron was discovered by Chadwick
- The orbits of sun, moon and planets weredetermined firstly by Ptolemy
- Unit of work in SI units is Joule Unit of Power in SI unit is Watt
- The rate of change of displacement is called Velocity
- Ohm is unit of Resistance
- Energy in sun produced by hydrogen nuclei is the result of Fusion
- Sun light takes 8.5 minutes to reach the on Earth
- Venus planet is closest to the Earth.
- Jupiter planet is biggest from the Sun.
- Mercury is the closest planet to the Sun.
- Art and science of growing flowers, fruit and vegetables is called Horticulture
- The energy generation in stars is due to Fusion of light nuclei.
- Sewing Machine was invented by Isaac M.Singer.
- Pepsin produced in stomach which digests the Proteins
- Blood sugar level is controlled by hormone called Insulin
- Purity of milk is measured by instrument called Lactometer
- Telephone was invented by Graham Bell
- One degree of longitude on the equator is equal to a distance of 112 km
- The coin rupia was first issued by Sher Shah Suri
- Kala Bagh is famous for minerals of Iron
- Jallianwala Bagh massacre occurred on April 13, 1919 behind
- The third battle of Panipat was fought between Marathas and Afghans.
- In deserts clouds do not precipitate due to low humidity
- Rain drop is shaped like a pear
- Drinker's apparatus is for measuring the amount of Alcohol in the blood.
- Atomic pile is a place where nuclear fission is made.
- Dewar's flask is called as thermos.
- Atomic weight of chemical compounds is determined by Mass spectroscopy.
- Tube light emits radiation ever after it is disconnected. It is due to Fluorescence
- The conversion of gases into liquid under high pressure and low temperature is called

- regulation.
- If a green leaf is seen in a red light its color will be black.
 - On a standard rainbow Violet color is on the inside of the curve
 - During the winter months 90% of fallen leaves are taken underground by earth worm
 - Hydrosis is the medical term for Sweating
 - Father of modern chemistry is Jabir bin Hayyan
 - Natural radioactivity was discovered by Becquerel in 1896.
 - The charge on an electron is Negative and charge on a proton is Positive
 - Fluorine is used to prevent tooth decay.
 - Wind blowing in a spiral form around a region of low atmospheric pressure is a Cyclone
 - Entomology deals with Insects
 - Female mosquito Aedes Aegypties is the cause of Dengue fever
 - The earth is the densest planet of universe. It has density of 5.515 time that of water.
 - Speed of sound in air is 1200 KM/Hour
 - 0.200 grams are equal to one carat.
 - Angiosperm includes the plants which have covered flowers and covered seed.
 - Plant cells resembles animal cell because having a cell membrane made up of protoplasm.
 - Atomic pile is a place where nuclear fission is made.
 - Dewar's flask is called as thermos.
 - Atomic weight of chemical compounds is determined by Mass spectroscopy.
 - Chief food of mosquito larva is microorganism found in water.
 - Chief food of butterfly larva is leaves of plants.
 - Com adds more oxygen to the atmosphere than it removes.
 - Earthworm is a bi-sexual.
 - Eyes of insects are compound.
 - Silk is obtained from cocoon of silk worm.
 - Clinical thermometer usually measures in Fahrenheit.
 - Tube light emits radiation even after it is disconnected. It is due to Fluorescence.
 - The conversion of gases into liquid under high pressure and low temperature is called regulation.
 - If a green leaf is seen in a red light its color will be black.
 - Skin does not excrete oil.
 - Plants growing in extremely dry condition are called Xerophytes.
 - Roots absorb water from soil which is Hygroscopic.
 - Legumes increase the fertility of the soil by adding nitrogen to the soil.
 - New varieties of organisms can be brought about by hybridization.
 - Male child is born if xy chromosomes are united.
 - Fertilization is fusion of two gametes of different strains.
 - Fruit developed from single ovary is called simple fruit.
 - Seeds are developed from Ovule.
 - Grains swell in water due to imbibition.
 - Chlorophyll contains magnesium.
 - Oxidation is the process in which electron is lost.
 - The rate of transpiration depends upon frequency of Stomata.
 - Light is necessary for photosynthesis because it produce ATP and reducing substrate.
 - Oxygen liberated from photosynthesis comes from water.
 - Cathy Pacific is an island.
 - In cryptogams, the sex organs are primitive and hidden.
 - Dyne is a unit of Force.
 - Photolysis is dissociation of water molecule in the chemical reaction of photosynthesis.
 - Sandy soil is dry in comparison to clay due to Capillary action.
 - Anton van Leeuwenhoek first time saw bacteria through a microscope made by him in 1683.
 - A seed is a ripened ovule.
 - Exobiology is the study of life or its possibility on other planets.
 - Lightning is formed when strong opposite charges in different clouds break down the resistance offered by intervening air.
 - John Dalton, an English scientist, gave Atomic Theory in 1803 describing atom as the smallest unit of an element
 - Gas in children's balloon is Helium
 - Ordinarily an atom is a neutral particle
 - The intensity of the energy released by an Earthquake is measured by the Richter scale
 - The most common element in the universe is Nitrogen.



Mathematics

- 1) A square matrix A is said to _____ matrix if $|A| = 0$
 (a) Singular (b) Non singular
 (c) Null (d) None
- 2) If A and B are two non-singular matrices of the same order then $(AB)^{-1} =$ _____
 (a) $A^{-1} B^{-1}$ (b) $B^{-1} A^{-1}$
 (c) $(BA)^{-1}$ (d) None
- 3) Two non singular matrices A, B of the same order are said to multiplication inverse of each other if $AB =$ _____
 (a) BA (b) $-AB$
 (c) $BA = I$ (d) None
- 4) If $A = \begin{bmatrix} 7 & 8 \\ 3 & 2 \end{bmatrix}$, then $\text{Adj } A =$ _____
 (a) $\begin{bmatrix} 2 & -8 \\ -3 & 7 \end{bmatrix}$ (b) $\begin{bmatrix} 7 & 3 \\ 8 & 2 \end{bmatrix}$
 (c) $\begin{bmatrix} 2 & 8 \\ -3 & 7 \end{bmatrix}$ (d) $\begin{bmatrix} 7 & -8 \\ -3 & 2 \end{bmatrix}$
- 5) If $A = \begin{bmatrix} 2 & 3 \\ 3 & 4 \end{bmatrix}$, then $A^{-1} =$ _____
 (a) $\begin{bmatrix} 4 & 3 \\ -3 & 2 \end{bmatrix}$ (b) $\begin{bmatrix} 4 & -3 \\ -3 & 2 \end{bmatrix}$
 (c) $\begin{bmatrix} -4 & 3 \\ 3 & -2 \end{bmatrix}$ (d) None
- 6) The matrix $\begin{bmatrix} 0 & 2 & 4 \\ -2 & 0 & 5 \\ -4 & -5 & 0 \end{bmatrix}$ is _____
 (a) Diagonal matrix (b) Scalar matrix
 (c) Skew-symmetric matrix (d) None of these
- 7) Order of the matrix $\begin{bmatrix} l & m & n \\ p & q & r \end{bmatrix}$ is _____
 (a) 3 by 2 (b) 2 by 3
 (c) 6 (d) None
- 8) The matrix $\begin{bmatrix} a & b \\ c & d \end{bmatrix}$ is _____ matrix.
 (a) Row matrix (b) Column matrix
 (c) Diagonal matrix (d) None
- 9) The matrix $\begin{bmatrix} a & b & c \\ d & e & f \\ g & h & i \end{bmatrix}$ is _____ matrix.
 (a) Rectangular matrix (b) Scalar matrix
 (c) Square matrix (d) None
- 10) Two matrices are said to be conformable for _____ if they are of the same order.
 (a) Only addition (b) Both addition and subtraction
 (c) Multiplication (d) None
- 11) Two matrices of the same order _____ commutative law under addition.
 (a) Sometimes satisfy (b) Always satisfy
 (c) Don't satisfy (d) None
- 12) Let A and B are the two matrices of the same order and $A + B = 0$ (0 is null matrix) then A and B are _____ of each other.
 (a) Transpose (b) Multiplication inverse
 (c) Additive inverse (d) None
- 13) Two matrices A and B are conformable for multiplication if:
 (a) Number of column of A = number of rows of B
 (b) Number of rows of A = number of columns of B
 (c) Order of A = Order of B
 (d) None
- 14) If A and B are two matrices and A^t and B^t are their transposes then $(AB)^t =$ _____
 (a) $A^t B^t$ (b) $(BA)^t$
 (c) $B^t A^t$ (d) None
- 15) Determinant of a square matrix A where $A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$ is _____
 (a) $ab - cd$ (b) $bc - ad$
 (c) $ac - bd$ (d) None
- 16) A square matrix in which non-diagonal elements are zero and all diagonal elements are equal is called _____
 (a) Zero matrix (b) Scalar matrix
 (c) Symmetric (d) None of these
- 17) A matrix obtained by interchanging rows and columns is called _____ matrix.
 (a) Symmetric (b) Identity matrix
 (c) Transpose (d) None
- 18) If A is a square matrix and $A^t = A$, then A is called _____
 (a) Skew-symmetric (b) Transpose
 (c) Symmetric (d) None
- 19) The set of numbers $\left\{ \frac{p}{q} \mid p, q \in \mathbb{Z}, q \neq 0 \right\}$ is called _____
 (a) Whole number (b) Irrational number
 (c) Rational number (d) None
- 20) The number $\frac{5}{33} = 0.151515.....$ is _____ number.
 (a) Rational (b) Irrational
 (c) Complex (d) None
- 21) $\pi = \frac{22}{7}$ is _____
 (a) Rational number (b) Irrational number
 (c) An integer (d) None of these
- 22) If "a" is a real number then the property $a = a$ is called _____
 (a) Reflexive property (b) Symmetric property
 (c) Transitive property (d) None of these
- 23) If "a" and "b" are two real numbers then the property $a = b \Rightarrow b = a$ is called _____
 (a) Transitive property (b) Symmetric property
 (c) Reflexive property (d) None of these
- 24) If a, b, c are the three real numbers then the property $a = b$ and $b = c \Rightarrow a = c$ is called _____
 (a) Symmetric property (b) Reflexive property
 (c) Transitive property (d) None of these

25) If a , b and c are the three real numbers, then the property [either $a = b$ or $a > b$ or $b < a$] is called _____.

- (a) Transitive property (b) Reflexive property
(c) Trichotomy property (d) None of these

26) If a real number is expressed in the form $\sqrt[n]{x} = y$, then in exponential form it can be written as:

- (a) $x = y^{1/n}$ (b) $x = y^n$
(c) $x = y^{-1/n}$ (d) None of these

27) If $a \in \mathbb{R}$ & $m, n \in \mathbb{N}$ then $(a^m)^n =$ _____.

- (a) a^{m+n} (b) a^{m-n}
(c) a^{mn} (d) None of these

28) A number which has a factor _____ if called an imaginary number.

- (a) -1 (b) $\sqrt{1}$
(c) $\sqrt{-1}$ (d) None of these

29) A number consists of a real part and imaginary parts is called _____ number.

- (a) Real (b) Rational
(c) Irrational (d) None of these

30) If $a + b$ is a complex number then conjugate of the complex number is give by _____.

- (a) $a + ib$ (b) $-a + ib$
(c) $a - ib$ (d) None of these

31) Sum of any two real number is _____ a real number.

- (a) Sometimes (b) Always
(c) Not (d) None of these

32) Multiplicative inverse of $\sqrt{2}$ is _____.

- (a) $-\sqrt{2}$ (b) 2
(c) $\frac{1}{\sqrt{2}}$ (d) None of these

33) The additive identity in real number is _____.

- (a) 1 (b) -1
(c) 0 (d) None of these

34) $(2i) - (3i) =$ _____.

- (a) -6 (b) 6
(c) -6i (d) 6i

35) The quotient of two complex numbers is _____.

- (a) Real (b) Imaginary
(c) Real and imaginary (d) None of these

36) $\sqrt{-1} \times \sqrt{-1} =$ _____.

- (a) 1 (b) -1
(c) i (d) 0

37) $\left(\frac{1}{7}\right)^3 =$ _____.

- (a) $\frac{3}{8}$ (b) $\frac{1}{8}$
(c) $\frac{1}{6}$ (d) $\frac{3}{6}$

38) $(-a)^3 \times (-a)^5 =$ _____.

- (a) $-a^{15}$ (b) a^{15}
(c) $-a^8$ (d) a^8

39) $(1 - i)(1 + i) =$ _____.

- (a) -2 (b) 2
(c) 0 (d) 1

40) The number 93200000 in scientific notation is expressed as

- (a) 93.2×10^6 (b) 932×10^5
(c) 9.32×10^7 (d) None of these

41) The equation $a^x = y$, where $a > 0$ and $a \neq 1$ in logarithmic form is expressed as _____.

- (a) $\text{Log}_a x = y$ (b) $\text{Log}_y a = x$
(c) $\text{Log}_a y = x$ (d) None of these

42) Logarithms having base " 10 " are called _____.

- (a) Common log (b) Briggs log
(c) Both a and b (d) None of these

43) Characteristic of logarithm may be _____.

- (a) Positive (b) Negative
(c) Positive or negative (d) None of these

44) Mantissa of logarithm is:

- (a) Always positive (b) Always negative
(c) Positive or negative (d) None of these

45) Characteristic of $\log 5420$ is _____.

- (a) 2 (b) 3
(c) 4 (d) None of these

46) 2.56×10^8 in standard notation is _____.

- (a) 25600000000 (b) 2.5600000000
(c) 256000000 (d) None of these

47) $\text{Log}_a mn =$ _____.

- (a) $\text{Log}_a m - \text{Log}_a n$ (b) $\text{Log}_a m \times \text{Log}_a n$
(c) $\text{Log}_a m + \text{Log}_a n$ (d) None of these

48) $\text{Log}_a \frac{m}{n} =$ _____.

- (a) $\frac{\text{Log}_a m}{\text{Log}_a n}$ (b) $\text{Log}_a m - \text{Log}_a n$
(c) $\text{Log}_a m + \text{Log}_a n$ (d) None of these

49) $\text{Log}_a m^x =$ _____.

- (a) $\text{Log}_a (m \times n)$ (b) $\text{Log}_a m \times \text{Log}_a n$
(c) $x \text{Log}_a m$ (d) None of these

50) $\text{Log}_a 1 =$ _____.

- (a) a (b) 1
(c) 0 (d) None of these

51) $\text{Log}_a a =$ _____.

- (a) a^2 (b) aloga
(c) a (d) None of these

52) If $\log_{10} x = 2$ then $x =$ _____.

- (a) 200 (b) $\frac{2}{10}$
(c) 1000 (d) 100

53) Base in natural logarithm is _____.

- (a) 10 (b) e
(c) π (d) None of these

- 54) $\log_m \times \log_n =$ _____
 (a) $\log_m + \log_n$ (b) $\log_m \times n$
 (c) \log_n (d) None of these
- 55) Fractional part of logarithm is called _____
 (a) Mantissa (b) Characteristic
 (c) Both a & b (d) None of these
- 56) $\log_e x =$ _____ where "e" is a special irrational number.
 (a) $x \log_e$ (b) $\log(x \times e)$
 (c) $\ln x$ (d) None of these
- 57) $P(x) = a_0 x^n + a_1 x^{n-1} + a_2 x^{n-2} + \dots + a_n$ is a polynomial of degree "n" if all exponents are positive and _____
 (a) $a_0 \neq 0$ (b) $a_1 \neq 0$
 (c) $a_2 \neq 0$ (d) None of these
- 58) $P(x) = a_0 x^n + a_1 x^{n-1} + a_2 x^{n-2} + \dots + a_n$ is a polynomial of degree _____
 (a) $n - 2$ (b) $n - 1$
 (c) n (d) None of these
- 59) If $P(x)$ and $Q(x)$ are the two polynomial then an expression $\frac{P(x)}{Q(x)}$ is a rational expression if:
 (a) $Q(x) \neq 0$ (b) $P(x) \neq 0$
 (c) Both a and b (d) None of these
- 60) A polynomial having two terms is called _____
 (a) Monomial (b) Trinomial
 (c) Binomial (d) None of these
- 61) A polynomial $P(x) = 2x^2 - x + 3$ is said to be _____
 (a) Trinomial (b) Monomial
 (c) Binomial (d) None of these
- 62) Every polynomial $P(x)$ can be written as $\frac{P(x)}{1}$, where "1" is a polynomial of degree _____
 (a) 1 (b) 0
 (c) $P(x)$ (d) None of these
- 63) $\frac{x^2 - 1}{x + 1}$ _____
 (a) is in lowest form (b) is not in lowest form
 (c) is a monomial (d) None of these
- 64) When $x = -2$ the value of $2x^2 - 3x$ is _____
 (a) 2 (b) -2
 (c) 14 (d) -14
- 65) $(a + b)^2 + (a - b)^2 =$ _____
 (a) 0 (b) $2(a^2 + b^2)$
 (c) $4ab$ (d) None of these
- 66) $(a + b)^2 - (a - b)^2 =$ _____
 (a) $2(a^2 + b^2)$ (b) 0
 (c) $4ab$ (d) None of these
- 67) $a^3 - 3ab(a - b) - b^3 =$ _____
 (a) $a^3 - b^3$ (b) $(a + b)^3$
 (c) $(a - b)^3$ (d) None of these
- 68) $(x + \frac{1}{x})(x^2 - 1 + \frac{1}{x^2}) =$ _____
 (a) $(x + \frac{1}{x})^3$ (b) $x^2 + \frac{1}{x^2}$
 (c) $(x - \frac{1}{x})^3$ (d) None of these
- 69) An expression involving one or more _____ number is called a surd.
 (a) Rational (b) Irrational
 (c) Both a & b (d) None of these
- 70) $a^{1/2}$ is a surd of _____ order.
 (a) $\frac{1}{2}$ (b) Second
 (c) a (d) None of these
- 71) An expression consisting of _____ terms in which one of them is surd is called binomial surd.
 (a) 2 (b) 3
 (c) 4 (d) None of these
- 72) Conjugate of the surd $5 + \sqrt{3}$ is _____
 (a) $-5 - \sqrt{3}$ (b) $5 - \sqrt{3}$
 (c) $-5 + \sqrt{3}$ (d) None of these
- 73) If $x = \sqrt{3} - \sqrt{2}$ then $\frac{1}{x} =$ _____
 (a) $\sqrt{3} + \sqrt{2}$ (b) $-\sqrt{3} - \sqrt{2}$
 (c) $-\sqrt{3} + \sqrt{2}$ (d) None of these
- 74) The formula $a^2 + 2ab + b^2 = (a + b)^2 = (a + b)(a + b)$ is called perfect square _____
 (a) Monomial (b) Binomial
 (c) Trinomial (d) None of these
- 75) For a perfect square there should be _____ terms.
 (a) 2 (b) 3
 (c) 4 (d) None of these
- 76) $a^2 - b^2 + 2ab - 1 =$ _____
 (a) $(a + b + a)(a - b + a)$ (b) $(a + b - 1)(a + b - 1)$
 (c) $(a + b - 1)(a - b + 1)$ (d) None of these
- 77) When a polynomial $P(x)$ of degree _____ is divided by $x - r$ gives a constant R where $R = P(r)$.
 (a) $N > 1$ (b) $N > 2$
 (c) $N \geq 1$ (d) None of these
- 78) _____ = Divisor \times Quotient + Remainder
 (a) Dividend (b) Divisor
 (c) Quotient (d) None of these
- 79) If $P(x) = (x - r)Q(x) + R$ where $Q(x)$ is quotient then $P(r) = R$ if $x =$ _____
 (a) $-r$ (b) r
 (c) $2r$ (d) None of these
- 80) A value for which $P(x)$ _____ is called a zero polynomial.
 (a) = 0 (b) > 0
 (c) < 0 (d) None of these
- 81) A linear polynomial $x - r$ is a factor of $P(x)$ if and only if _____ is zero of the polynomial $P(x)$.
 (a) x (b) r

- (c) $x - r$ (d) None of these
- 82) Zero of the polynomial $P(x) = x^2 - 4x + 3$ is _____.
- (a) 3 (b) -3
(c) 2 (d) None of these
- 83) When $P(x) = 2x^3 - 3x^2 + x - 2$ is divided by $x - 3$, the remainder is _____.
- (a) 26 (b) 28
(c) 38 (d) None of these
- 84) Factors of $x^2 + 2x - 24$ are _____.
- (a) $x + 4, x - 6$ (b) $x - 4, x + 6$
(c) $x + 3, x - 8$ (d) None of these
- 85) Factors of $8y^3 - z^3$ are:
- (a) $2y - z, 4y^2 + 2yz + z^2$ (b) $2y - z, 2y - z, 2y - z$
(c) $2y - z, 4y^2 - 2yz + z^2$ (d) None of these
- 86) $\frac{1}{a+b} + \frac{b}{a^2 - b^2} =$ _____.
- (a) $\frac{b+1}{a^2 - b^2}$ (b) $\frac{a}{a^2 - b^2}$
(c) $\frac{b}{a^2 - b^2}$ (d) $\frac{b+a}{a^2 - b^2}$
- 87) H.C.F of two or more than polynomials is a polynomial of _____ degree which divides exactly the given polynomials.
- (a) Highest (b) Lowest
(c) n^{th} (d) None of these
- 88) There are _____ methods of finding H.C.F.
- (a) 2 (b) 3
(c) 4 (d) 5
- 89) H.C.F of $x^2 - y^2$ and $x^2 - xy$ is _____.
- (a) $(x + y)(x - y)$ (b) $x - y$
(c) $x(x + y)(x - y)$ (d) None of these
- 90) L.C.M by factorization is given by the formula L.C.M = common factor \times _____.
- (a) Highest common factor (b) Least common factor
(c) Non common factor (d) None of these
- 91) L.C.M of two polynomials by division method is given by L.C.M = (product of polynomials) \div _____.
- (a) Addition of polynomials (b) Difference of polynomials
(c) H.C.F of polynomials (d) None of these
- 92) If A and B are the two polynomials and H and L are their H.C.F and L.C.M respectively then $A \times B =$ _____.
- (a) $H + L$ (b) $L + H$
(c) $H \times L$ (d) None of these
- 93) If $P(x), Q(x), R(x)$ and $S(x)$ are algebraic expressions then $\frac{P(x)}{Q(x)} + \frac{R(x)}{S(x)} =$ _____.
- (a) $\frac{P(x).R(x)}{Q(x).S(x)}$ (b) $\frac{P(x).S(x)}{Q(x).R(x)}$
(c) $\frac{P(x).Q(x)}{R(x).S(x)}$ (d) None of these
- 94) L.C.M of $x^2 + 8$ and $x + 2$ is _____.
- (a) $x + 2$ (b) $(x^2 - 2x + 4)$
(c) $x^2 + 8$ (d) None of these

- 95) H.C.F of $x^2 - \frac{1}{x^2}$ and $x + \frac{1}{x}$ is _____.
- (a) $x^2 - \frac{1}{x^2}$ (b) $(x^2 - \frac{1}{x^2})(x + \frac{1}{x})$
(c) $x + \frac{1}{x}$ (d) None of these
- 96) L.C.M of $(a - b)^4$ and $(a - b)^3$ is _____.
- (a) $(a - b)^7$ (b) $(a - b)^3$
(c) $(a - b)^4$ (d) None of these
- 97) Simplified form of $\frac{b}{25a^2 - b^2} - \frac{1}{5a - b}$ is _____.
- (a) $\frac{5a}{25a^2 - b^2}$ (b) $\frac{5a}{5a - b}$
(c) $\frac{-5a}{5a + b}$ (d) $\frac{-5a}{25a^2 - b^2}$
- 98) $\frac{ax^3 + ay^3}{a^2(x+y)} =$ _____.
- (a) $ax^2 + ay^2$ (b) $\frac{x^2 + y^2}{a}$
(c) $\frac{x^2 - xy + y^2}{a}$ (d) $\frac{x^2 + xy + y^2}{a}$
- 99) In finding H.C.F by division method the last _____ is H.C.F.
- (a) Divident (b) Divisor
(c) Remainder (d) None of these
- 100) Equation of the form $ax + b = 0$ where $a \neq 0$ and $a \in \mathbb{Q}$ is called _____ equation.
- (a) Linear (b) Quadratic
(c) Cubic (d) None of these
- 101) All the values of the variable which make the equation a true sentence are called _____ of the equation.
- (a) Solutions (b) Roots
(c) Coefficient (d) Both a and b
- 102) Solution of an equation is always written within:
- (a) () (b) { }
(c) [] (d) None of these
- 103) Equation of the form $\sqrt{x + 2} = 5$ is called _____ equation.
- (a) Linear (b) Quadratic
(c) Radical (d) None of these
- 104) Absolute value of any number x is denoted by $|x|$ where $|x| = x$ if _____.
- (a) $x < 0$ (b) $x > 0$
(c) $x = 0$ (d) None of these
- 105) The absolute value of a number is always _____.
- (a) Negative (b) Non-negative
(c) Non-positive (d) None of these
- 106) $|a + b|$ _____.
- (a) $\geq |a| + |b|$ (b) $= |a| + |b|$
(c) $\leq |a| + |b|$ (d) None of these
- 107) $|a b|$ _____.
- (a) $= |a| |b|$ (b) $\geq |a| \cdot |b|$
(c) $\leq |a| |b|$ (d) None of these
- 108) $\frac{a}{b}$ _____.
- (a) $= \frac{|a|}{|b|}$ (b) $\geq \frac{|a|}{|b|}$

- (c) $\leq \frac{|a|}{|b|}$ (d) None of these
- 109) If $|x - 1| = 7$ then $x =$ _____
 (a) $\{-8, 6\}$ (b) $\{8, -6\}$
 (c) $\{8\}$ (d) None of these
- 110) If $|\frac{x}{6}| = 12$ then $x =$ _____
 (a) $\{72\}$ (b) $\{72, -72\}$
 (c) $\{2\}$ (d) None of these
- 111) An inequality statement contains:
 (a) $>$ and $<$ (b) \geq and \leq
 (c) Both a and b (d) None of these
- 112) If x and y are two real number then the property
 $\{\forall x, y \in \mathbb{R} / x > y \vee x = y \vee x < y\}$ is called _____
 (a) Trichotomy (b) Transitive
 (c) Additive (d) None of these
- 113) If $a > b$ then $-a - -b$:
 (a) \geq (b) \leq
 (c) $<$ (d) None of these
- 114) An inequality has _____ number of solutions.
 (a) Infinite (b) Finite
 (c) Few (d) None of these
- 115) If $5x + 4 \leq 24 \Rightarrow x$ _____
 (a) \geq (b) \leq
 (c) $<$ (d) None of these
- 116) If $\frac{x-1}{3} < \frac{1-x}{2}$, $x \in \mathbb{Z}$ then $x =$ _____
 (a) $\{\dots, -2, -1, 0, 1\}$ (b) $\{2, 3, 4, \dots\}$
 (c) $\{\dots, -2, -1, 0\}$ (d) None of these
- 117) The solution set of $2x = -x$ is _____
 (a) $\{-1\}$ (b) $\{2\}$
 (c) $\{1\}$ (d) None of these
- 118) The solution set of $-1 \leq x \leq 1$ where $x \in \mathbb{N}$ is _____
 (a) $\{-1, 0, 1\}$ (b) $\{0\}$
 (c) $\{1\}$ (d) None of these
- 119) The solution set of $|x| - 2 = 0$ is _____
 (a) $\{4\}$ (b) $\{2\}$
 (c) $\{\pm 2\}$ (d) None of these
- 120) The solution set of $\sqrt{x} = -10$ is _____
 (a) $\{10\}$ (b) $\{-10\}$
 (c) $\{-10\}$ (d) None of these
- 121) On a real number line, Hollow Circle "O" shows that number is _____
 (a) included (b) Not included
 (c) Both a and b (d) None of these
- 122) An ordered associated with a point in 2 dimensional plane is called _____
 (a) Cartesian coordinate system (b) Rectangular coordinate system
 (c) Both a and b (d) None of these
- 123) If "A" and "B" are any two sets then their Cartesian product is denoted by _____
 (a) AB (b) A.B
 (c) $A \times B$ (d) None of these
- 124) Cartesian product $A \times B$ of two sets A and B where $a \in A$ and $b \in B$ is defined as _____
 (a) $\{(b, a) / a, b \in \mathbb{R}\}$ (b) $\{(a, b) / a, b \in \mathbb{R}\}$
 (c) Both a and b (d) None of these
- 125) In 2-dimensional plane, vertical line is called _____
 (a) x-axis (b) y-axis
 (c) z-axis (d) None of these
- 126) In two-dimensional plane, the horizontal line is called _____
 (a) y-axis (b) x-axis
 (c) z-axis (d) None of these
- 127) If ordered pair (x, y) is in first quadrant then _____
 (a) $x < 0, y < 0$ (b) $x > 0, y < 0$
 (c) $x < 0, y > 0$ (d) $x > 0, y > 0$
- 128) If ordered pair (x, y) is in second quadrant then _____
 (a) $x > 0, y < 0$ (b) $x < 0, y > 0$
 (c) $x < 0, y < 0$ (d) None of these
- 129) If ordered pair (x, y) is in third quadrant then _____
 (a) $x > 0, y > 0$ (b) $x < 0, y > 0$
 (c) $x < 0, y < 0$ (d) $x > 0, y < 0$
- 130) If ordered pair (x, y) is in 4th quadrant then _____
 (a) $x < 0, y > 0$ (b) $x > 0, y > 0$
 (c) $x < 0, y < 0$ (d) $x > 0, y < 0$
- 131) In ordered pair (a, b) , a is called _____
 (a) Ordinate (b) Abscissa
 (c) x-axis (d) None of these
- 132) In ordered pair (a, b) , b is called _____
 (a) y-axis (b) Ordinate
 (c) z-axis (d) None of these
- 133) The point $(a, 0)$ lies on _____
 (a) y-axis (b) x-axis
 (c) z-axis (d) None of these
- 134) The point $(0, b)$ lies on _____
 (a) x-axis (b) y-axis
 (c) z-axis (d) None of these
- 135) An equation $ax + by = c$ is called a linear equation in _____ variables.
 (a) 5 (b) 4
 (c) 2 (d) None of these
- 136) The graph of $y = 3$, the distance of the line 3 unit _____ the x-axis.
 (a) Above (b) Below
 (c) on (d) None of these

137) The graph of the equation $x = a$ is _____ line.

- (a) Vertical (b) Horizontal
(c) Inclined (d) None of these

138) The graph of the equation $y = b$ is a line and at a distance of "b" unit from _____ points on x-axis.

- (a) Few (b) Many
(c) All (d) None of these

139) In equation $y = mx + c$, the slope of the graph is _____.

- (a) c (b) m
(c) x (d) y

140) In equation $y = mx + c$, if $x = 0$, then y-coordinate is _____.

- (a) y (b) m
(c) c (d) x

141) In the equation $y = mx$, y-coordinate of every point is _____ times x-coordinate.

- (a) m (b) x
(c) y (d) None of these

142) In the equation $M=f(K)$.

- (a) K is a function of M (b) M is a function of K
(c) Both a and b (d) None of these

143) The point (3, -4) is located in:

- (a) I Quadrant (b) II Quadrant
(c) III Quadrant (d) IV Quadrant

144) _____ lines can pass through one point.

- (a) 2 (b) 3
(c) 4 (d) Infinite

145) The angle between two co-ordinate axis is _____.

- (a) 180° (b) 0°
(c) 90° (d) None of these

146) The line $x = 3$ is parallel to _____.


- (a) x-axis (b) y-axis
(c) Both a and b (d) None of these

147) For equation $2x + y = 6$, order pair _____ is the solution.

- (a) (1, 3) (b) (3, 1)
(c) (3, 0) (d) None of these

148) If "H" denotes Hecto- and "A" denotes Acre then $1H =$ _____ A.

- (a) 3.5 (b) 2.5
(c) 1.5 (d) None of these

149) If  then

- (a) x and y both increasing (b) x and y both decreasing
(c) Both a and b (d) None of these

150) In temperature conversion scale $^\circ F = \frac{9}{5} ^\circ C + 32$

- (a) $^\circ C$ depends upon $^\circ F$ (b) $^\circ F$ depends upon $^\circ C$
(c) $^\circ F$ depends upon 32 (d) None of these



151) If _____ then

- (a) Point "P" is solution of l_1 (b) Point "P" is solution of l_2
(c) Point "P" is solution of l_1 and l_2 (d) None of these

152) Distance between two points (x, y) and (x₂, y₂) given by:

- (a) $+\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ (b) $+\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$
(c) Both a and b (d) None of these

153) _____ combines algebra, calculus & geometry.

- (a) Co-ordinate geometry (b) Practical geometry
(c) Both a and b (d) None of these

154) If three points A, B, C lie on the same _____ they are called collinear points.

- (a) Plane (b) Line
(c) Space (d) None of these

155) A triangle in which all the three sides are equal is called _____ triangle.

- (a) Equilateral (b) Isosceles
(c) Right (d) None of these

156) A triangle in which two sides are equal is called _____ triangle.

- (a) Equilateral (b) Right
(c) Isosceles (d) None of these

157) If all the three sides of a triangle are different in length it is called _____ triangle.

- (a) Equilateral (b) Isosceles
(c) Scalene (d) None of these

158) If (x₁, y₁) and (x₂, y₂) are the end pointed of a segment AB, then midpoint of \overline{AB} is _____.

- (a) $(\frac{x_1 + y_1}{2}, \frac{x_2 + y_2}{2})$ (b) $(\frac{x_1 - y_1}{2}, \frac{x_2 - y_2}{2})$
(c) $(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2})$ (d) None of these

159) If (x₁, y₁), (x₂, y₂), (x₃, y₃) are the vertices of a triangle, then centroid of the triangle is _____.

- (a) $(\frac{x_1 + x_2 + x_3}{3}, \frac{y_1 + y_2 + y_3}{3})$ (b) $(\frac{y_2 + y_1 + y_3}{2}, \frac{x_1 + x_2 + x_3}{2})$
(c) $(\frac{x_1 - x_2 - x_3}{3}, \frac{y_1 - y_2 - y_3}{3})$ (d) None of these

160) The point through which all the medians of sides of a triangle pass is called _____.

- (a) Midpoint (b) Centre
(c) Centroid (d) None of these

161) The points through which all the angle bisectors of triangle pass is called _____.

- (a) Centre (b) In-centre
(c) Centroid (d) None of these

162) A circle touches the sides of a triangle internally is called _____.

- (a) Circum circle **(b) In-circle**
 (c) Concentric circle (d) None of these
- 163) A straight line represents _____ angle.
 (a) 90° (b) 190°
(c) 180° (d) 45°
- 164) The incentre is equidistant from:
 (a) One side (b) Two sides
(c) Three side (d) None of these
- 165) Distance between points (2, 0) and (0, 2) is _____.
 (a) $\sqrt{2}$ (b) 4
(c) $2\sqrt{2}$ (d) 8
- 166) Undirected distance between two points is _____.
(a) Positive (b) Negative
 (c) Both Positive and Negative (d) None of these
- 167) Perpendicular segments meet in _____ angle.
(a) 90° (b) 180°
 (c) 45° (d) 60°
- 168) If 3 points lie on the same line they are said to be _____ points.
 (a) Similar (b) Co-planner
(c) Co-linear (d) None of these
- 169) The midpoint of the segment (3, 0) _____ (3, 4)
 (a) (3, 3) (b) (6, 2)
 (c) (6, 4) **(d) (3, 2)**
- 170) If in a right angled triangle \overline{AB} = Base, \overline{BC} = perpendicular AC = Hypotenuse, then Pythagorean theorems is given as _____.
 (a) $|AB|^2 + |AC|^2 = |BC|^2$ (b) $|AB|^2 - |BC|^2 = |AC|^2$
(c) $|AB|^2 + |BC|^2 = |AC|^2$ (d) $|BC|^2 + |AC|^2 = |AB|^2$
- 171) A triangle in which only one angle is of 90° , the triangle is called _____ triangle.
 (a) Isosceles triangle (b) Equilateral triangle
(c) Right triangle (d) None of these
- 172) A triangle has _____ elements.
 (a) 3 (b) 5
(c) 6 (d) 9
- 173) (1-1) correspondence between two triangles is established by _____ different ways.
 (a) 4 (b) 3
(c) 6 (d) 5
- 174) If two sides of a triangle are congruent then sides _____ are also congruent.
 (a) Adjacent to them (b) Behind of them
(c) Opposite to them (d) None of these
- 175) If _____ and one side of two right angled triangle are congruent then triangles are congruent.
 (a) Bases (b) Perpendiculars
(c) Hypotenuses (d) None of these
- 176) Sum of measures of acute angles of a right angled triangle is _____.
 (a) 180° (b) 60°
(c) 90° (d) 190°
- 177) If measures of each side of triangle is 60° , then triangle is _____ triangle.
 (a) Isosceles (b) Scalene
(c) Equilateral (d) None of these
- 178) If two angles of a triangle are _____ then triangles is right angled triangle.
 (a) Supplementary **(b) Complementary**
 (c) Right (d) None of these
- 179) The number of acute angles in an acute angled triangle is _____.
 (a) 2 **(b) 3**
 (c) Both 2 and 3 are possible (d) None of these
- 180) In _____ triangle, bisector of any one of its angles divide the triangle into two congruent triangles.
(a) Equilateral (b) Isosceles
 (c) Right angled (d) Scalene
- 181) There is at most one obtuse angle possible in _____ triangle.
 (a) Right angled (b) Equilateral
 (c) Isosceles **(d) Any triangle**
- 182) In a right angled isosceles triangle measure of each base angle is _____.
 (a) 60° (b) 30°
(c) 45° (d) 90°
- 183) If 3 corresponding sides of the two triangles $\triangle ABC$ and $\triangle DEF$ are congruent then which one of the following is true.
 (a) $\angle B \cong \angle E$ (b) $\angle A \cong \angle D$
 (c) $\angle C \cong \angle F$ **(d) All of the above**
- 184) A closed geometrical figure having 4 sides is called _____.
 (a) Rectangle (b) Square
(c) Quadrilateral (d) Parallelogram
- 185) When two coplanar parallel lines cut by a transversal two pairs of _____ angle are congruent.
 (a) Vertical angles **(b) Alternate angles**
 (c) Right angles (d) None of these
- 186) When two lines intersect each other two pair of _____ angles are congruent.
 (a) Alternate angles (b) Adjacent angles
(c) Vertical angles (d) None of these
- 187) A line segment joining the midpoint of one side of a triangle to its opposite vertex is called _____.
(a) Median (b) Altitude
 (c) Perpendicular (d) None of these
- 188) If two opposite sides of a quadrilateral are congruent and parallel, it is a _____.
 (a) Rectangle (b) Square
(c) Parallelogram (d) Trapezium
- 189) The line segment, joining the midpoints of two sides of a triangle, is parallel to the 3rd side and is equal _____ of its length.

- (a) Half (b) One-half
(c) Double (d) None of these
- 190) The intersecting point of the _____ of a triangle is called centroide.
(a) Altitudes (b) Medians
(c) Perpendicular bisectors (d) None of these
- 191) _____ equilateral triangles can be made by joining the midpoints of the sides of the equilateral triangle.
(a) 2 (b) 3
(c) 4 (d) None of these
- 192) Sum of interior angles of a quadrilateral is _____.
(a) 180° (b) 300°
(c) 360° (d) 320°
- 193) If diagonals of a quadrilateral divide the figure in the four congruent triangles then the quadrilateral is a _____.
(a) Trapezium (b) Parallelogram
(c) Rectangle (d) Square
- 194) Any point on the _____ of a line segment is equidistant from its end point.
(a) Median (b) Right bisector
(c) Perpendicular (d) None of these
- 195) The _____ of sides of the triangle are concurrent.
(a) Right bisector (b) Median
(c) Altitude (d) None of these
- 196) The sum of the lengths of any two sides of a triangle is _____ the length of the third side.
(a) Lesser than (b) Greater than
(c) Equal to (d) None of these
- 197) From a point outside a line, the perpendicular is _____ distance from the point to the line.
(a) The shortest (b) Longest distance
(c) Indinite (d) None of these
- 198) In any right angled triangle, _____ is the longest side.
(a) Base (b) Perpendicular
(c) Hypotenusus (d) None of these
- 199) Perimeter of any rectangle is _____ its diagonal.
(a) Greater than 3 times (b) Greater than twice
(c) Greater than 4 times (d) None of these
- 200) Exterior angle of a triangle and its adjacent interior angle are _____.
(a) Complementary (b) Supplementary
(c) Congruent (d) None of these
- 201) Measure of one side of an equilateral triangle is 6cm, length of its median is _____ 9cm.
(a) Greater than (b) Less than
(c) Equal to (d) Greater than or equal to
- 202) If a line segment intersect the two sides of a triangle in the same ratio than it is _____ to the 3rd side.
(a) Parallel (b) Perpendicular
(c) Perpendicular bisector (d) None of these
- 203) If two triangles are similar, the measures of their corresponding sides are _____.
(a) Equal (b) Different
(c) Proportional (d) None of them
- 204) If the square of one side of a triangle is equal to the sum of the squares of the other two sides, then the triangle is a _____.
(a) Isosceles triangle (b) Scalene triangle
(c) Right angled triangle (d) None of these
- 205) Which of the following are the sides of a right-angled triangle?
(a) 3, 4, 5 (b) 2, 3, 4
(c) 4, 5, 6 (d) None of these
- 206) If one acute angle of a right angled triangle is 25°, the other acute angel is _____.
(a) 55° (b) 65°
(c) 75° (d) 85°
- 207) Perpendicular distance between two parallel liens is _____ different.
(a) Never (b) Sometimes
(c) Often (d) None of these
- 208) Perpendicular from vertex of a triangle to its opposite sides is called _____.
(a) Perpendicular bisector (b) Median
(c) Altitude (d) Angle bisector
- 209) Point of intersection of the medians of a triangle divides them ratio:
(a) 1 : 1 (b) 2 : 1
(c) 3 : 1 (d) None of these
- 210) If a point is equidistant from the end point of a line segment then it must lie on its _____.
(a) Bisector (b) Perpendicular bisector
(c) Perpendicular (d) None of these
- 211) Usually a quadratic equation has _____ solution.
(a) One (b) Two
(c) Three (d) None of these
- 212) An equation of the form $ax + b = 0$ is called a _____ degree equation.
(a) First (b) Second
(c) Third (d) None of these
- 213) The equation $ax^2 + bx + c = 0$ will be quadratic if:
(a) $c \neq 0$ (b) $a \neq 0$
(c) $b \neq 0$ (d) None of these
- 214) Quadratic formula is given by:
(a) $\frac{\pm b - \sqrt{b^2 - 4ac}}{2a}$ (b) $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
(c) $\frac{-b \pm \sqrt{b^2 + 4ac}}{2a}$ (d) None of these
- 215) Equation that involves terms of the form a^x ($a \neq 1, a > 0$) are called _____ equation.
(a) Radical (b) Quadratic
(c) Exponential (d) None of these
- 216) Equation of the form $ax^4 + bx^2 + c = 0$ is _____ to a quadratic equation.
(a) Reducible (b) Irreducible

- (c) Equivalent (d) None of these
- 217) A quadratic equation is possibly solved by _____ ways.
(a) 2 (b) 3
(c) 4 (d) 5
- 218) Equation of the form $ax + b = 0$ is called _____ equation.
(a) Linear (b) Non-Linear
(c) Radical (d) None of these
- 219) The equation of the form $\sqrt{ax + b} = cx + d$ is called _____ equation.
(a) Linear (b) Quadratic
(c) Radical (d) None of these
- 220) A solution of the transformed equations that does not satisfy the original _____ equation is called extraneous solution.
(a) Linear (b) Radical
(c) Quadratic (d) None of these
- 221) _____ quadratic equations can be solved by factorization.
(a) Every (b) Some of the
(c) No (d) None of these
- 222) The values of the variable that satisfy an equation are called _____ of the equation.
(a) Solutions (b) Coefficient
(c) Degree (d) None of these
- 223) Highest _____ of the variable in an algebraic equation is called degree of the equation.
(a) Coefficient (b) Exponent
(c) Degree (d) None of these
- 224) For a perfect square there should be _____ terms in an equation.
(a) 2 (b) 3
(c) 4 (d) 5
- 225) The factors of the expression $x^2 - 8x - 20$ are:
(a) $(x+10)(x-2)$ (b) $(x-10)(x+2)$
(c) $(x-5)(x+4)$ (d) $(x+5)(x-4)$
- 226) The solution set of $x^2 - 2x + 1 = 0$ is:
(a) {1} (b) {2}
(c) {-1, 2} (d) {-1, 1}
- 227) The solution set of the equation $x^2 = K$ is:
(a) $\{K^2\}$ (b) $\{K\}$
(c) $\{-K\}$ (d) $\{K, -K\}$
- 228) The nature of roots of a given quadratic equation depends upon its _____.
(a) Coefficient (b) Exponents
(c) Discriminant (d) None of these
- 229) If $b^2 - 4ac = 0$, then roots of the concerned quadratic equation are _____.
(a) Unequal and real (b) Unequal & inquiry
(c) Rational & equal (d) None of these
- 230) If $b^2 - 4ac > 0$, then roots are _____.
(a) Equal (b) Unequal & real
(c) Unequal & Irrational (d) None of these
- 231) If $b^2 - 4ac < 0$ then roots are _____.
(a) Unequal & real (b) Equal
(c) Unequal & irrational (d) None of these
- 232) If $b^2 - 4ac > 0$ and $(b^2 - 4ac)$ is a perfect square then roots are _____.
(a) Rational (b) Unequal & irrational
(c) Unequal & real (d) None of these
- 233) If $b^2 - 4ac > 0$ & $(b^2 - 4ac)$ is not perfect square then roots are _____.
(a) Equal (b) Unequal & irrational
(c) Real, unequal and irrational (d) None of these
- 234) $i^2 =$ _____ (i iota)
(a) +1 (b) ± 1
(c) -1 (d) None of these
- 235) Cube roots of unity are:
(a) 1, $\frac{-1+i\sqrt{3}}{2}$ (b) $-1, \frac{-1+i\sqrt{3}}{2}$
(c) 1, $\frac{-1+i\sqrt{3}}{2}$ (d) None of these
- 236) If 1, w and w^2 are cube roots of unity, then $1 + w + w^2 =$ _____.
(a) -1 (b) +1
(c) ± 1 (d) None of these
- 237) If $w = \frac{-1+i\sqrt{3}}{2}$, then $w^2 =$ _____.
(a) $\frac{1+i\sqrt{3}}{2}$ (b) $\frac{1-i\sqrt{3}}{2}$
(c) $\frac{-1-i\sqrt{3}}{2}$ (d) None of these
- 238) The product of cube roots of unity is equal to _____.
(a) 0 (b) 1
(c) -1 (d) None of these
- 239) The complex cube roots of unity are _____.
(a) Opposite of each other (b) Reciprocal of each other
(c) Equal (d) None of these
- 240) $(x + y)(x + wy)(x + w^2y) =$ _____.
(a) $x^3 + y^3$ (b) $x^3 - y^3$
(c) $x^3 + y^3$ (d) None of these
- 241) If w is a cube root of unity then $w^3 =$ _____.
(a) -1 (b) 0
(c) w (d) None of these
- 242) If w is a cube root of unity then $w =$ _____.
(a) w^2 (b) $\frac{1}{w^2}$
(c) $-w^2$ (d) None of these
- 243) $(x - y)(x - wy)(x - w^2y) =$ _____.
(a) $x^3 + y^3$ (b) $x^3 - y^3$
(c) $x^2 + y^2$ (d) None of these
- 244) If α and β are the roots of $ax^2 + bx + c = 0$ then $\alpha + \beta =$ _____.
(a) $-\frac{a}{c}$ (b) $-\frac{a}{b}$
(c) $-\frac{b}{a}$ (d) None of these
- 245) If α and β are the roots of $ax^2 + bx + c = 0$ then $\alpha\beta =$ _____.
(a) $\frac{c}{a}$ (b) $-\frac{a}{b}$
(c) $-\frac{b}{a}$ (d) None of these
- 246) If " s " and " p " are sum and product of roots of a quadratic equation then the quadratic equation is given by _____.
(a) $x^2 - px + s = 0$ (b) $x^2 - sx + p = 0$
(c) $x^2 - sx + p = 0$ (d) None of these
- 247) The sum of roots of a quadratic equation is 2 and the sum of cube of roots is 98 - the equation is:
(a) $x^2 - 2x - 15 = 0$ (b) $x^2 - 2x + 15 = 0$
(c) $x^2 - 4x + 15 = 0$ (d) None of these
- 248) If a, b, c are positive real numbers then both the roots of the equation $ax^2 + bx + c = 0$ are always:
(a) Real and positive (b) Real & negative
(c) Rational & Unequal (d) None of these
- 249) In a quadratic equation $2x^2 - 4x + 5 = 0$ sum of roots is _____.
(a) 2 (b) -2
(c) -4 (d) 5
- 250) The equation $6x^2 + x - 1 = 0$ has _____ roots.
(a) Rational and equal (b) Rational
(c) Unequal and imaginary (d) None of these
- 251) If speed increases, _____ distance will be covered in less time.
(a) More (b) Less
(c) Equal (d) None of these
- 252) If pressure decreases, then volume _____.
(a) Decreases (b) Increases
(c) Remains same (d) None of these

- 253) In relation $y = 3x - 5$, if the value of x increases, the value of y _____.
- (a) Decreases (b) Increases
(c) Remains same (d) None of these
- 254) If $y \propto x$ then $k =$ _____.
- (a) $\frac{y}{x}$ (b) $\frac{x}{y}$
(c) xy (d) None of these
- 255) If $x \propto \frac{1}{x}$ then $K =$ _____.
- (a) $\frac{x}{y}$ (b) $\frac{y}{x}$
(c) xy (d) None of these
- 256) In direct relationship, if one variable decreases, the second variable will _____.
- (a) Increases (b) Decreases
(c) Remain same (d) None of these
- 257) In indirect relationship if one variable increases, the second variable _____.
- (a) Decreases (b) Increases
(c) Remains same (d) None of these
- 258) Comparison among quantities of the same unit is called _____.
- (a) Ratio (b) Proportion
(c) Relation (d) None of these
- 259) Ratio may exist between _____ same quantities.
- (a) Only two (b) Two or more
(c) Two or less (d) None of these
- 260) Simplified form of 4:12 is:
- (a) 2:6 (b) 8:24
(c) 1:3 (d) None of these
- 261) Comparison between two _____ is called proportion.
- (a) Quantities (b) Ratios
(c) Numbers (d) None of these
- 262) In $a:b :: c:d$ _____ are called extremes.
- (a) a, d (b) b, c
(c) a, c (d) b, d
- 263) If $a:b :: c:d$ then, _____ are called means.
- (a) a, d (b) a, c
(c) b, c (d) None of these
- 264) Pressure "p" on the quantity of gas in a container varies inversely on its volume V then:
- (a) $p \propto v$ (b) $vp \propto kv$
(c) $p \propto \frac{1}{v}$ (d) None of these
- 265) 3:7 is equivalent to:
- (a) $\frac{3}{7}$ (b) $\frac{7}{3}$
(c) 7:3 (d) None of these
- 266) If a, b and c are in continued proportion then this relation is denoted by:
- (a) $a:b :: c:b$ (b) $a:b:c$
(c) $a:b :: b:c$ (d) None of these
- 267) If $a:b :: c:b$ then:
- (a) $ab = cd$ (b) $ad = bc$
(c) $ac = bd$ (d) None of these
- 268) If $a:b = c:d \Rightarrow a:c = b:d$ this property is called:
- (a) Alternendo property (b) Invertendo property
(c) Dividendo property (d) None of these
- 269) If $\frac{a}{b} = \frac{c}{d} \Rightarrow \frac{a}{c} = \frac{b}{d}$, this property is called:
- (a) Componendo property (b) Invertendo property
(c) Alternando property (d) None of these
- 270) If $\frac{a}{b} = \frac{c}{d} \Rightarrow \frac{a+b}{b} = \frac{c+d}{d}$, this property is called:
- (a) Alternendo property (b) Invertendo property
(c) Componendo property (d) None of these
- 271) If $\frac{a}{b} = \frac{c}{d}$ Then $\frac{a-b}{a} = \frac{c-d}{d}$, this property is called:
- (a) Alternendo property (b) Invertendo property
(c) Componendo property (d) None of these
- (a) Alternendo property (b) Invertendo property
(c) Dividendo property (d) None of these
- 272) If a, b, c are in continued proportion then:
- (a) $ac = b^2$ (b) $ab = c^2$
(c) $bc = a^2$ (d) None of these
- 273) If $p(x)$ and $q(x)$ are two polynomials then $\frac{p(x)}{q(x)}$ is called rational fraction if:
- (a) $p(x) \neq 0$ (b) $q(x) \neq 0$
(c) $p(x) = 0$ (d) None of these
- 274) A rational fraction $\frac{p(x)}{q(x)}$, $Q(x) \neq 0$ is proper fraction, if degree of $p(x)$ is _____ the degree of $Q(x)$.
- (a) Greater than (b) Less than
(c) Equal to (d) None of these
- 275) A rational fraction $\frac{p(x)}{Q(x)}$, $Q(x) \neq 0$ is an improper fraction if the degree of $p(x)$ is _____ the degree of $Q(x)$.
- (a) Equal to or greater than (b) Equal to or lesser than
(c) Equal (d) None of these
- 276) $\frac{1}{x^2-1} =$ _____.
- (a) $\frac{1}{x+1} - \frac{1}{x-1}$ (b) $\frac{1}{2(x+1)} - \frac{1}{2(x-1)}$
(c) $\frac{1}{2(x-1)} - \frac{1}{2(x+1)}$ (d) None of these
- 277) $\frac{x^2}{x^2-1}$ is:
- (a) Proper fraction (b) Improper fraction
(c) Irrational fraction (d) None of these
- 278) Resolution of fraction into partial fraction depends upon the factors of:
- (a) Denominator (b) Numerator
(c) Both numerator and denominator (d) None of these
- 279) Collection of well defined distinct objects is called a _____.
- (a) Group (b) Aggregato
(c) Set (d) None of these
- 280) If x is a number of Set A, then it is written symbolically as:
- (a) $x \in A$ (b) $x \in A$
(c) $x \notin A$ (d) None of these
- 281) The numbers of a set are written in _____ order.
- (a) Any (b) Specific
(c) Increasing (d) None of these
- 282) There are _____ methods of writing a set:
- (a) 2 (b) 3
(c) 4 (d) 5
- 283) "A set of first 10 natural number" is _____ method of expressing a set.
- (a) Tabular (b) Set Builder
(c) Descriptive (d) None of these
- 284) $A = \{1, 2, 3, \dots, 10\}$ is _____ method of expressing a set.
- (a) Set builder (b) Tabular
(c) Descriptive (d) None of these
- 285) $\{x / x \in \mathbb{N} \text{ and } x \leq 10\}$ is _____ method of expressing a set.
- (a) Set builder (b) Descriptive
(c) Tabular (d) None of these
- 286) $\{0, \pm 1, \pm 2, \dots\}$ is set of _____.
- (a) Natural numbers (b) Integers
(c) Prime numbers (d) None of these
- 287) $\{x / x \in \frac{p}{q}, q \neq 0 \text{ and } p, q \in \mathbb{Z}\}$ is set of _____.
- (a) Prime numbers (b) Natural numbers
(c) Rational numbers (d) None of these
- 288) _____ = $\{x / x \in A \text{ or } x \in B\}$.
- (a) AUB (b) $A \cap B$
(c) $(A \cup B)'$ (d) None of these

- 289) _____ = $\{x/x \in A \text{ and } x \in B\}$.
 (a) $A \cup B$ (b) $A' \cup B'$
 (c) $A \cap B$ (d) None of these
- 290) Two sets A and B are disjoint if _____.
 (a) $A \cap B = \phi$ (b) $A \cup B = \phi$
 (c) $(A \cup B) = \phi$ (d) None of these
- 291) $\{x/x \in A \text{ and } x \notin B\} =$ _____.
 (a) B/A (b) AB
 (c) A/B (d) None of these
- 292) If U is a universal set and A is a sub set of U then $A' =$ _____.
 (a) $U - A$ (b) A/U
 (c) U' (d) None of these
- 293) For a non-empty set A, $(A')' =$ _____.
 (a) A' (b) A
 (c) U (d) None of these
- 294) For a non-empty set B, $B \cup B' =$ _____.
 (a) U (b) U'
 (c) B (d) None of these
- 295) $A \cap A' =$ _____.
 (a) U (b) ϕ
 (c) A (d) None of these
- 296) If U universal set and A and B are any two subsets of U then $(A \cup B)' =$ _____.
 (a) $(A \cup B)'$ (b) $A' \cap B'$
 (c) $(A \cap B)'$ (d) None of these
- 297) If U is universal set and A and B are any two subsets of U then $(A \cup B) =$ _____.
 (a) $A \cap B'$ (b) $(A \cup B)'$
 (c) $A \cup B'$ (d) None of these
- 298) For any three sets A, B and C the property $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$ is called _____.
 (a) Distributive property of union over intersection
 (b) Distributive property of intersection over union
 (c) Associative property of union (d) None of these
- 299) Venn diagram is used to show the relation among different _____.
 (a) Numbers (b) Groups
 (c) Sets (d) None of these
- 300) Two ordered pair (a, b) = (c, d) if and only if:
 (a) $a = b$ & $c = d$ (b) $a = d$ & $b = c$
 (c) $a = c$ & $b = d$ (d) None of these
- 301) If a set A has "m" elements and set B has "n" elements, then number of subsets of $A \times B$ are:
 (a) $m \times n$ (b) $2^{m \times n}$
 (c) 2^{m+n} (d) None of these
- 302) If A is any set and ϕ is an empty set then $A \times \phi =$ _____.
 (a) A (b) ϕ
 (c) $A \phi$ (d) None of these
- 303) If $A = \{a, b\}$ and $B = \{1, 2\}$ then number of possible subsets in $A \times B$ are:
 (a) 4 (b) 8
 (c) 16 (d) None of these
- 304) If R is a binary relation from set A to set B _____ then $R =$ _____.
 (a) $\{(x, y) / x \in A \wedge y \in B\}$ (b) $\{(x, y) / x \in B \wedge y \in A\}$
 (c) $\{(x, y) / x \in A \vee y \in B\}$ (d) None of these
- 305) If "f" be a function from A to B then f is _____ function if Range of f \neq B:
 (a) One-one function (b) On-to function
 (c) Into function (d) None of these
- 306) Let "f" be a function from A to B then "f" is _____ if there is no repetition in the second element of all ordered pairs in f:
 (a) One-to function (b) In-to function
 (c) (1-1) function (d) None of these
- 307) Let "f" be a function from A to B then "f" is _____ if range of "f" = B:
 (a) Into function (b) On-to function
 (c) (1-1) function (d) None of these
- 308) For $\{(1, 2), (3, 4), (5, 6)\}$, domain is _____.
 (a) $\{2, 4, 6\}$ (b) $\{1, 2, 3, 4, 5, 6\}$
 (c) $\{1, 3, 5\}$ (d) None of these
- 309) The set $\{0, 1, 2, \dots\}$ is set of _____.
 (a) Natural numbers (b) Whole numbers
 (c) Even numbers (d) None of these
- 310) If $A \subseteq B$ and _____ then $A = B$.
 (a) $B \subseteq A$ (b) $B \subseteq A$
 (c) $A \subseteq B$ (d) None of these
- 311) For non-empty set A, $A' =$ _____.
 (a) $\{x / x \in U \wedge x \notin A\}$ (b) $\{x / x \in A \wedge x \in A\}$
 (c) $\{x / x \notin U \wedge x \in A\}$ (d) None of these
- 312) The term _____ shows how often a value appears.
 (a) Range (b) Frequency
 (c) Mean (d) None of these
- 313) The number which shows the start and end of a class is called _____.
 (a) Class boundaries (b) Class width
 (c) Class limit (d) None of these
- 314) _____ is the difference between upper and lower class boundaries.
 (a) Class limit (b) Class width
 (c) Range (d) None of these
- 315) _____ is diagrammatic representation of data in the form of adjacent rectangles.
 (a) Histogram (b) Frequency polygon
 (c) Cumulative frequency polygon (d) None of these
- 316) _____ is a graphical representation of frequency distribution.
 (a) Frequency polygon (b) Histogram
 (c) Cumulative frequency polygon (d) None of these
- 317) _____ is the sum of all the observations of a data divided by their number.
 (a) Arithmetic mean (b) Median
 (c) Mode (d) None of these
- 318) _____ is a value in the centre of arranged observations.
 (a) Mean (b) Median
 (c) Mode (d) None of these
- 319) _____ is the value which occurs most often in a set of observations.
 (a) Median (b) Mean
 (c) Mode (d) None of these
- 320) _____ is defined as n^{th} root of product of "n" values:
 (a) Harmonic mean (b) Geometric mean
 (c) Arithmetic mean (d) None of these
- 321) _____ is the reciprocal of arithmetic mean of the reciprocal of the observations:
 (a) Geometric mean (b) Harmonic mean
 (c) Arithmetic mean (d) None of these
- 322) _____ is defined as sum of average of squares of differences of all observations from their average.
 (a) Variance (b) Standard deviations
 (c) Range (d) None of these
- 323) Positive square root of _____ is called standard deviation:
 (a) Range (b) Variance
 (c) Dispersion (d) None of these
- 324) A cumulative frequency curve is also called _____.
 (a) Histogram (b) Pie chart
 (c) Ogive (d) None of these
- 325) A value representing a set of data is called _____.
 (a) Variance (b) Standard deviations
 (c) Average (d) None of these
- 326) Median of the data 63, 65, 66, 67, 69 is _____.
 (a) 63 (b) 67
 (c) 66 (d) 69

- 327) The average which is not affected by extreme values is called _____.
- (a) Mean (b) Mode
(c) Median (d) Geometric mean
- 328) Mode of the data 5, 7, 7, 5, 3, 7, 2, 8, 2 is _____.
- (a) 7 (b) 5
(c) 2 (d) 8
- 329) Standard deviation of the data 5, 5, 5, 5, 5 is _____.
- (a) 5 (b) 6
(c) 0 (d) None of these
- 330) The sum of 30 observations is 1500 its average will be:
- (a) 1500 (b) 150
(c) 50 (d) None of these
- 331) To find the public opinion or trend the most suitable statistic is _____.
- (a) Mode (b) Median
(c) Variance (d) None of these
- 332) Trigonometry means measurement of a _____.
- (a) Rectangle (b) Triangle
(c) Square (d) None of these
- 333) Angle measured in anticlockwise direction is considered to be _____ angle.
- (a) Positive angle (b) Negative angle
(c) Right angle (d) None of these
- 334) If the initial ray OA completes a relation in anticlockwise direction, angle so formed is _____ degree.
- (a) 300° (b) 260°
(c) 360° (d) None of these
- 335) A degree is further divided into _____ equal parts called minutes.
- (a) 60° (b) 360°
(c) 260° (d) None of these
- 336) A radian is the measure of the central angle subtends an arc "l" equal to its _____ of the circle.
- (a) Diameter (b) Circumference
(c) Radius (d) None of these
- 337) If "r" is radius of a circle then number of radians (angle) in complete relation is given by _____ + r.
- (a) πr (b) πr^2
(c) $2\pi r$ (d) None of these
- 338) 2π radians = _____.
- (a) 360° (b) 180°
(c) 90° (d) None of these
- 339) Area "A" of sector of circle with radius "r" whose central angle is θ radian, is given by $A = \frac{1}{2} r^2 \theta$.
- (a) $\frac{1}{2} r\theta^2$ (b) $\frac{1}{2} r^2 \theta$
(c) $2r\theta^2$ (d) None of these
- 340) Angles having same initial and terminal sides are called _____ angles.
- (a) Quadrantal angles (b) Radian angles
(c) Co-terminal angles (d) None of these
- 341) $0^\circ, 90^\circ, 180^\circ, 270^\circ, 360^\circ$ are called _____ angles.
- (a) Co-terminal angles (b) Quadrantal angles
(c) Radian angles (d) None of these
- 342) In right angled triangle, $\tan \theta = \frac{BC}{AC}$.
- (a) $\frac{BC}{AC}$ (b) $\frac{AB}{AC}$
(c) $\frac{BC}{AB}$ (d) None of these
- 343) In second quadrant _____ is positive.
- (a) $\cos \theta$ (b) $\sin \theta$
(c) $\tan \theta$ (d) None of these
- 344) $1 + \tan^2 \theta = \frac{1}{\cos^2 \theta}$.
- (a) $\cot^2 \theta$ (b) $\operatorname{Cosec}^2 \theta$
(c) $\sec^2 \theta$ (d) None of these
- 345) $\tan \theta + \cot \theta = \frac{1}{\sin \theta \cos \theta}$.
- (a) $2\cos^2 \theta - 1$ (b) $1 - 2\sin \theta \cos \theta$
(c) $\sec \theta \operatorname{Cosec} \theta$ (d) None of these
- 346) If an object is _____ of observer then angle between horizontal line and observations line of sight is called angle of elevation.
- (a) Below the level (b) Above the level
(c) At the same level (d) None of these
- 347) $\tan 90^\circ =$ _____.
- (a) 1 (b) 0
(c) Undefined (d) None of these
- 348) $\cot 45^\circ =$ _____.
- (a) $\frac{1}{2}$ (b) $-\frac{1}{2}$
(c) $\frac{1}{\sqrt{2}}$ (d) 1
- 349) $45^\circ =$ _____ radian.
- (a) $\frac{\pi}{3}$ (b) $\frac{\pi}{4}$ (c) $\frac{\pi}{6}$ (d) $\frac{\pi}{2}$
- 350) In any triangle, the sum of squares on any two sides is _____ twice the square on half the third side together with twice the square on the median which bisect the third side.
- (a) Greater than (b) Less than
(c) Equal to (d) None of these
- 351) One and only one circle can pass through non-collinear points.
- (a) 3 (b) 4
(c) 5 (d) None of these
- 352) Perpendicular from the centre of a circle on a chord _____.
- (a) Bisect it (b) Do not bisect it
(c) Pass through it making angle 190° (d) None of these
- 353) If _____ chords of a circle are congruent then they will be equidistant from the centre.
- (a) 2 (b) 3
(c) 4 (d) None of these
- 354) A line segment having both end points on a circle and not passing through the centre is called _____.
- (a) Secant (b) Diameter
(c) Chord (d) None of these
- 355) A line which intersects the circle in two points is _____.
- (a) Chord (b) Diameter
(c) Secant (d) None of these
- 356) If a point lies in the exterior of a circle, then its distance from the centre is _____.
- (a) Less than radius (b) Equal to radius
(c) Greater than radius (d) None of these
- 357) Two circles are said to be concentric if:
- (a) Their radii are equal in length (b) Their diameters are equal in length
(c) Their circumferences are equal in length (d) They have the same centre.
- 358) The longest chord in a circle is its _____.
- (a) Radius (b) Diameter
(c) Circumference (d) None of these
- 359) _____ circle can pass through three non-collinear points.
- (a) Only one (b) Only two
(c) Only three (d) None of these
- 360) A straight line from the centre of a circle to bisect a chord (which is not a diameter) is _____ to the chord.
- (a) Parallel (b) Perpendicular
(c) Not perpendicular (d) None of these
- 361) The line which intersects the circle in two points is:
- (a) Diameter (b) Chord
(c) Tangent (d) None of these
- 362) The two arcs of two circles are congruent if:
- (a) The circles are congruent
(b) The corresponding central angles are congruent
(c) Both a & b (d) None of these

- 363) A line segment having both end points on a circle and not passing through the centre is called _____.
 (a) Secant (b) Diameter
 (c) **Chord** (d) None of these
- 364) Two chords of a circle which are equidistant from the centre are _____ to each other.
 (a) **Congruent** (b) Same
 (c) Perpendicular (d) None of these
- 365) The largest chord in a circle is _____.
 (a) Radius (b) **Diameter**
 (c) Secant (d) None of these
- 366) The _____ tangents drawn to a circle from a point, outside it, are equal in length.
 (a) **2** (b) 3
 (c) 4 (d) 5
- 367) If two circles touch externally, the distance between their centers is equal to the sum of their _____.
 (a) Diameters (b) **Radii**
 (c) Circumferences (d) None of these
- 368) If a line is drawn _____ to a radial segment of a circle at its outer end point, it is tangent to the circle at that point.
 (a) Parallel (b) **Perpendicular**
 (c) Not perpendicular (d) None of these
- 369) At any point on the circumference of a circle _____ to the circle can be drawn.
 (a) **Only one tangent** (b) Only two tangents
 (c) Only three tangent (d) None of these
- 370) A line which is perpendicular to a radial segment of a circle at its outer end, lying on the circle, is called a _____.
 (a) **Tangent** (b) Secant
 (c) Diameter (d) None of these
- 371) In a circle, a tangent and a diameter that intersect are _____.
 (a) Parallel (b) **Perpendicular**
 (c) Not perpendicular (d) None of these
- 372) From a point at a distance of 5cm from the centre of a circle of radius 3cm tangents are drawn to the circle the length of each tangent will be:
 (a) 3cm (b) 5cm
 (c) **4cm** (d) 6cm
- 373) Two different lines may be tangent to a circle at _____.
 (a) Same point (b) **At two different points**
 (c) At three different points (d) None of these
- 374) A tangent to a circle may contain _____.
 (a) Centre of the circle (b) **A point on circumference**
 (c) Two points on circumference (d) None of these
- 375) If two arcs of a circle are congruent then the corresponding _____ are equal.
 (a) Radii (b) Diameters
 (c) **Chords** (d) None of these
- 376) If two chords of a circle are equal then their corresponding _____ are congruent.
 (a) Diameters (b) Radii
 (c) **Arcs** (d) None of these
- 377) Equal _____ of a circle subtend equal angles at the centre.
 (a) Diameters (b) Radii
 (c) **Chords** (d) None of these
- 378) The measure of a central angle of a minor arc of a circle is _____ that of the angle subtended by the corresponding major arcs.
 (a) **Two times** (b) 3 times
 (c) 4 times (d) None of these
- 379) The angle in a semi-circle is a _____ angle.
 (a) Acute (b) Obtuse
 (c) **Right** (d) None of these
- 380) The angle in a segment greater than a semicircle is _____ a right angle.
 (a) **Less than** (b) Greater than
 (c) Equal to (d) Greater than or equal
- 381) The angle in a segment _____ a semi circle is greater than a right angle.
 (a) Greater than (b) **Less than**
 (c) Equal to (d) Greater than or equal
- 382) The opposite angles of any quadrilateral inscribed in circle are _____.
 (a) Complementary (b) **Supplementary**
 (c) Right (d) None of these
- 383) If a side of a cyclic quadrilateral be produced, the exterior angle formed is _____ interior opposite angle.
 (a) **Equal to** (b) Less than
 (c) Greater than or equal to (d) Greater than
- 384) The central angle of a minor arc of circle is 40° the angle subtended by corresponding major arc is of _____.
 (a) **20°** (b) 80°
 (c) 60° (d) 120°
- 385) The angle in a major segment of a circle is _____.
 (a) Less than 45° (b) **Less than 90°**
 (c) Greater than 135° (d) None of these
- 386) Any cyclic parallelogram is a _____.
 (a) Square (b) **Rectangle**
 (c) Rhombus (d) None of these
- 387) _____ central angle will always intercept a minor arc.
 (a) **An acute** (b) An obtuse
 (c) Right (d) None of these
- 388) Vertical central angles will intercept arcs of the _____ measure.
 (a) **Same** (b) Different
 (c) Both a & b (d) None of these
- 389) A circle that passes through the vertices of a triangle is called _____.
 (a) Inscribed circle (b) **Circumcircle**
 (c) Semi circle (d) None of these
- 390) A circle that touches all the three sides of a triangle internally is called _____.
 (a) **Inscribed circle** (b) Circumcircle
 (c) Semi circle (d) None of these
- 391) A tangent line on two circles when circles are on opposite sides of tangent line is called _____.
 (a) Transverse common tangent (b) Internal tangent
 (c) **Both a & b** (d) None of these
- 392) A tangent line on two circles when circles are on the same side of tangent line is called _____.
 (a) Direct common tangent (b) Internal tangent
 (c) External tangent (d) **Both a & b**
- 393) A hexagon is a closed geometrical fig having _____ corners.
 (a) 5 (b) **6**
 (c) 7 (d) 8
- 394) A hexagon and a regular hexagon are _____ geometrical figs.
 (a) Same (b) **Different**
 (c) Opposite (d) None of these
- 395) A closed geometrical fig having 6 corners and distance between two consecutive corners is same is called _____.
 (a) **Regular hexagon** (b) Regular heptagon
 (c) Regular pentagon (d) None of these

SETS & NUMBERS

- A set is represented by a capital letter A, B, C, ..., Z of English alphabets and its member or elements are written within
(a) brackets () (b) brackets []
(c) brackets { } (d) none of these
- Which mathematician gave the concept of sets in 19th century?
(a) George Cantor (b) George Nicholas
(c) George Adams (d) None of these
- Which of the followings is a set of pets?
(a) $A = \{\text{cow, horse, goat,....}\}$
(b) $A = \{\text{lion, horse, goat,....}\}$
(c) $A = \{\text{cow, Tiger, goat,....}\}$
(d) $A = \{\text{cow, horse, elephant,....}\}$
- Symbolically, we can write the members of the set A as Cow if A is read as
(a) Cow is a number of the set A
(b) Cow is a base of the set A
(c) Cow is an element of the set A
(d) Cow is a set of the A
- Which is the set of natural numbers?
(a) N (b) W
(c) E (d) P
- Which is the set of whole numbers?
(a) N (b) W
(c) E (d) P
- Which is the set of even numbers?
(a) N (b) W
(c) E (d) P
- Which is the set of prime numbers?
(a) N (b) W
(c) E (d) P
- Which is the set of odd numbers?
(a) N (b) W
(c) O (d) P
- Which of the following statement is a set?
(a) The five provinces of Pakistan
(b) The geometrical instruments
(c) The capital letters of the English alphabet
(d) All of these
- Which of the following statement is a set?
(a) The players of Pakistan cricket team
(b) The natural numbers less than 50.
(c) The whole numbers less than 9
(d) All of these
- Which of the following statement is not a set?
(a) The sharp boys of a school.
(b) The naughty boys of the street.
(c) The difficult questions of a test,
(d) All of these
- Tabular form of a set is also known as
(a) Roster form (b) Brackets form
(c) Set form (d) None of these
- $A = \{1,2,3,4,5,6\}$
(a) The set of natural numbers less than 7
(b) The set of whole numbers less than 100.
(c) The set of four games
(d) The set of all even numbers.
- $B = \{0,1,2,.....,99\}$
(a) The set of natural numbers less than 7
(b) The set of whole numbers less than 100
(c) The set of four games
(d) The set of all even numbers
- $C = \{\text{cricket, football, hockey, tennis}\}$
(a) The set of natural numbers less than 7
(b) The set of whole numbers less than 100.
(c) The set of four games
(d) The set of all even numbers
- $E = \{2,4,6,.....\}$
(a) The set of natural numbers less than 7
(b) The set of whole numbers less than 100.
(c) The set of four games
(d) The set of all even numbers
- $F = \{\text{potato, ladyfinger, carrot, brinjal}\}$
(a) The set of four vegetables
(b) The set of whole numbers less than 100.
(c) The set of four games
(d) The set of all even numbers
- $N = \{1,2,3,.....\}$
(a) The set of all natural numbers
(b) The set of whole numbers less than 100.
(c) The set of four games
(d) The set of all even numbers
- $O = \{1,3,5,.....\}$
(a) The set of natural numbers less than 7
(b) The set of whole numbers less than 100.

- (c) The set of all even numbers
(d) The set of all odd numbers
21. $W = \{0, 1, 2, 3, \dots\}$
(a) The set of whole numbers
(b) The set of natural numbers less than 7
(c) The set of whole numbers less than 100.
(d) The set of all even numbers
22. {father, mother, brother, sister}
(a) The set of four family members
(b) The set of whole numbers less than 100
(c) The set of four games
(d) The set of all even numbers
23. "A set having a finite number of elements is called
(a) Finite set (b) Infinite set
(c) Prime Set (d) Odd Set
24. "A set whose elements are countable is called
(a) Finite set (b) Infinite set
(c) Prime Set (d) Odd Set
25. A set having unlimited number of elements is called
(a) Finite set (b) Infinite set
(c) Prime Set (d) Odd Set
26. The set of counting numbers is an example of
(a) Finite set (b) Infinite set
(c) Prime Set (d) Odd Set
27. The set of whole numbers is an example of
(a) Finite set (b) Infinite set
(c) Prime Set (d) Odd Set
28. The set of whole numbers
(a) $W = \{1, 2, 3, 4, \dots\}$
(b) $W = \{1, 2, 3, 4, \dots, 100\}$
(c) $W = \{1, 3, 5, 7, \dots\}$
(d) $W = \{0, 1, 2, 3, 4, \dots\}$
29. A set having a single element is called a
(a) Infinite set (b) Prime Set
(c) Odd Set (d) Singleton set
30. "A set having no element is known as an
(a) Empty set (b) Null set
(c) Odd Set (d) Both a & b
31. An empty set is denoted by the Greek letter ϕ , which is called
(a) Pai (b) Reg
(c) Red (d) Beta
32. The set of rivers in Pakistan.
(a) Finite set (b) Infinite set
(c) Empty set (d) Odd set
33. The set of all natural numbers
(a) finite set (b) Infinite set
- (c) Empty set (d) Odd set
34. The set of number of people on the moon
(a) finite set (b) Infinite set
(c) Empty set (d) Odd set
35. A collection of distinct and well defined objects is called a
(a) Set (b) Thing
(c) Element (d) Atom
36. What is meant by the symbol \in ?
(a) It means "is the element of the set"
(b) It means Descriptive form of set
(c) It means tabular form of set
(d) None of these
37. Name the forms for describing a set.
(a) Descriptive form and tabular form
(b) Only Descriptive form
(c) Only tabular form
(d) None of these
38. One-to-one correspondence cannot be established between _____ sets.
(a) non-equivalent (b) well-defined
(c) Empty (d) Non-equivalent
39. _____ means a specific property of an object that enables it to be an element of a set or not.
(a) non-equivalent (b) well-defined
(c) Empty (d) Non-equivalent
40. The symbol _____ means does not belong to the set.
(a) \subseteq (b) \notin
(c) ϕ (d) \leftrightarrow
41. _____ set is also known as null set.
(a) non-equivalent (b) well-defined
(c) Empty (d) Non-equivalent
42. The symbol is used for two _____ sets.
(a) non-equivalent (b) well-defined
(c) Empty (d) Non-equivalent
43. To represent two equal sets, we use the symbol:
(a) \leftrightarrow (b) \subset
(c) \subseteq (d) $=$
44. To write an empty set, we use the symbol:
(a) \in (b) \subseteq
(c) ϕ (d) \leftrightarrow
45. If $A = \{1, 2, 3\}$ and $B = \{0, 1, 2, 3, 4\}$, then:
(a) $A \subset B$ (b) $A = B$
(c) $A \subseteq B$ (d) $A \leftrightarrow B$
46. $\{11\}$ is known as:
(a) Null set (b) singleton set
(c) subset (d) power set

47. To represent the equivalent sets, we use the symbol:
 (a) = (b) \in
 (c) \subset (d) \leftrightarrow
48. The numbers _____ together with the natural numbers give us the whole numbers
 (a) 0 (b) 1
 (c) 2 (d) 3
49. The numbers that we use for counting objects are called the _____ numbers.
 (a) Natural (b) even
 (c) Whole (d) Multiplicative
50. The numbers that can be divided by 2 are called _____ numbers.
 (a) natural (b) even
 (c) Whole (d) Multiplicative
51. To represent the set of _____ numbers we use the capital letter W.
 (a) natural (b) even
 (c) Whole (d) Multiplicative
52. The product of 1 and a whole number is always the whole number itself. Hence 1 is called the _____ identity.
 (a) natural (b) even
 (c) Whole (d) Multiplicative
53. The numbers that cannot be divided by 2 exactly are called:
 (a) even numbers (b) natural numbers
 (c) whole numbers (d) odd numbers
54. The smallest natural number is:
 (a) 0 (b) 1
 (c) 2 (d) 3
55. To represent the set of natural numbers, we use the capital letter,
 (a) E (b) O
 (c) N (d) W
56. The sum of two whole numbers is always:
 (a) a prime number (b) an odd number
 (c) an even number (d) a whole number
57. The symbols 1,2,3,4,5,6,7,8,9 are called.
 (a) numerals (b) points
 (c) signals (d) lines
58. The numbers 1,2,3, are called:
 (a) whole numbers (b) natural numbers
 (c) real numbers (d) rational numbers
59. Symbol of natural numbers is:
 (a) R (b) W
 (c) E (d) N
60. Counting number gives us:
 (a) natural numbers (b) whole numbers
 (c) real numbers (d) even numbers
61. Symbol of whole number is:
 (a) N (b) O
 (c) W (d) P
62. We represent whole numbers as:
 (a) {0,1,2,3,...} (b) {0,1,2,3,4,...}
 (c) {1,3,5,7,...} (d) {2,4,6,8,...}
63. Which of them is the smallest whole number?
 (a) 0 (b) 1
 (c) 2 (d) 3
64. Each number is one more than its previous number is called:
 (a) predecessor (b) successor
 (c) points (d) none of above
65. Each number is one less than its, next number is called:
 (a) predecessor (b) successor
 (c) points (d) none of above
66. Which of them is the successor of 0?
 (a) 1 (b) 2
 (c) 3 (d) 4
67. Which of them is the predecessor of 3?
 (a) 1 (b) 2
 (c) 3 (d) 4
68. > 7 but < 15 means:
 (a) 7,8,9,10,11,12,13,14
 (b) 8,9,10,11,12,13,14
 (c) 8,9,10,11,12,13,14,15
 (d) 7,8,9,10,11,12,13,14, 15
69. $5 + 6 =$ _____
 (a) 4 (b) 3
 (c) 11 (d) 12
70. $15 < 3$ means:
 (a) 4,5,6 (b) 1,2,3
 (c) 0,1,2 (d) 0,1,2,3
71. What is the sum of 90 and 60?
 (a) 150 (b) 30
 (c) 540 (d) 453
72. What is the subtraction of 842 and 391?
 (a) 450 (b) 451
 (c) 452 (d) 453
73. What is the subtraction of 2105 and 1726?
 (a) 377 (b) 378
 (c) 379 (d) 380
74. Which of them is the sum of 9056 and 8172?
 (a) 17231 (b) 17230
 (c) 17229 (d) 17228
75. Which of the sum of 634 and 1797

- (a) 811 (b) 810
(c) 809 (d) 808
76. Commutative law means:
(a) $4 + 5 = 5 + 4$ (b) $4 - 5 = 5 + 4$
(c) $4 - 5 = 5 + 3$ (d) None of above
77. $6 + 7 = 7 + 6$ is known as:
(a) commutative law (b) associative law
(c) additive identity (d) none of above
78. $2 + (3+4) = (2+3) + 4$ is known as:
(a) commutative law
(b) associative law
(c) additive identity
(d) none of above
79. $1 + 0 =$ _____
(a) 0 (b) 1
(c) 2 (d) 3
80. Which of them is known as additive identity?
(a) 0 (b) 1
(c) 2 (d) 3
81. Least common multiple of 24, 36, 54, 81 is:
(a) 642 (b) 644
(c) 646 (d) 648
82. The product of 74 and 23 is:
(a) 1700 (b) 1701
(c) 1702 (d) 1703
83. The product of 888 and 56 is:
(a) 49728 (b) 49729
(c) 49720 (d) 49727
84. The product of 22 and 22 is:
(a) 483 (b) 484
(c) 485 (d) 486
85. $27552 \div 112 =$ _____
(a) 244 (b) 245
(c) 246 (d) 247
86. What is the smallest 4-digit number which is exactly divisible by 135?
(a) 1086 (b) 1084
(c) 1082 (d) 1080
87. $2 \times 3 = 3 \times 2$ is commutative law w.r.t.
(a) multiplication (b) addition
(c) subtraction (d) division
88. Commutative law w.r.t multiplication is:
(a) $a + b = b + a$ (b) $a \times b = b \times a$
(c) $a - b = b - a$ (d) $a - b = b - d$
89. Which of them is associative law?
(a) $a \times (b \times c) = a \times (a \times b)$
(b) $(a \times b) \times c = a + (b + c)$
(c) $a + b = b + a$
(d) $a \times b = b \times a$
90. $2 \times (3 \times 5) = 2 \times (3 \times 5) =$ _____
(a) 29 (b) 30
(c) 31 (d) 32
91. Which of them is distributive law?
(a) $a \times (b \times c) = (a \times b) \times c$
(b) $a \times b = b \times a$
(c) $a \times (b + c) = ab + ac$
(d) $a - b = b - a$
92. $A \times (b - c) = ab - ac$ is known as:
(a) distribution law over subtraction
(b) distribution law over addition
(c) distributive law over division
(d) distributive law over multiplicative
93. Which of the them is multiplicative identity?
(a) 0 (b) 1
(c) 2 (d) 3
94. $1 \times 2 = 2$ is known as:
(a) multiplicative identity
(b) addition identity
(c) subtraction identity
(d) division identity
95. The numbers having no common factor other than 1 are called _____ numbers.
(a) Co-prime (b) Composite
(c) Factorization (d) Odd
96. A number having a factor other than 1 and itself is called _____ number.
(a) Co-prime (b) Composite
(c) Factorization (d) Prime
97. _____ is the only even prime number.
(a) 0 (b) 1
(c) 2 (d) 3
98. A number is divisible by _____ if the digit at the units place is 0 or even number.
(a) 0 (b) 1
(c) 2 (d) 3
99. The process of writing a number into its factors is called _____.
(a) Co-prime (b) Composite
(c) Factorization (d) Prime
100. The factor of every number is:
(a) 0 (b) 1
(c) 2 (d) 3
101. Every number greater than 1 has at least factors:
(a) one (b) two
(c) three (d) four

102. A number is divisible by 6 if it has even number at the unit place and the sum of its digits is divisible by:
 (a) 2 (b) 3
 (c) 6 (d) 9
103. The LCM of 2 and 3 is:
 (a) 2 (b) 3
 (c) 4 (d) 6
104. If the LCM of two numbers 4 and 9 is 36, then its HCF will be:
 (a) 1 (b) 2
 (c) 9 (d) 12
105. Factors of 18 are:
 (a) 1, 2, 3, 4, 6, 9, 18
 (b) 1, 2, 3, 4, 5, 6, 9, 18
 (c) 2, 4, 6, 9, 18
 (d) 1, 3, 4, 5, 7, 9, 18
106. Factor of 12 are:
 (a) 1, 2, 3, 4, 6 (b) 1, 2, 3, 4, 6, 12
 (c) 1, 3, 4, 6, 12 (d) 3, 4, 6, 12
107. Multiple of 15 are:
 (a) 1, 2, 3, 4, 6 (b) 1, 3, 4, 5, 15
 (c) 1, 3, 5, 15 (d) 3, 4, 5, 7, 15
108. Multiple of 2 are:
 (a) 1, 2, 3, 4, 5, 6, (b) 1, 3, 5, 7,
 (c) 2, 4, 6, 8, 10, (d) 2, 3, 5, 7,
109. The numbers which are divisible by 2 called numbers:
 (a) even (b) odd
 (c) prime (d) composite
110. Set of even numbers is:
 (a) {1, 3, 5, 7,} (b) $E = \{2, 4, 6, \dots\}$
 (c) {2, 3, 5, 7,} (d) {4, 6, 8,}
111. The numbers which are not divisible by 2 called numbers:
 (a) even (b) composite
 (c) odd (d) prime
112. Set of odd numbers is:
 (a) {2, 4, 6,} (b) {1, 3, 5, 7,}
 (c) {2, 3, 5, 7,} (d) {4, 6, 8,}
113. A number having factors other than 1 and itself is called numbers.
 (a) even (b) odd
 (c) composite (d) prime
114. A number having exactly two factors, 1 and itself is called number.
 (a) even (b) odd
 (c) composite (d) prime
115. 1, 2, 4, 7, 8, 14, 28, 56 are factors of:
 (a) 56 (b) 58
 (c) 60 (d) 65
116. 1, 11, 21 are factors of:
 (a) 125 (b) 121
 (c) 128 (d) 131
117. If the digits at the units place is 0, 2, 4, 6 or 8. It is divisible by:
 (a) 2 (b) 3
 (c) 4 (d) 5
118. If the sum of its digits is divisible by 3. It is divisible by which:
 (a) 2 (b) 3
 (c) 4 (d) 5
119. If the digits at the units and tens places are 0's. it is divisible by:
 (a) 3 (b) 4
 (c) 5 (d) 6

ANSWERS

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. c | 2. a | 3. a | 4. c | 5. a | 6. b | 7. c | 8. d | 9. c | 10. d |
| 11. d | 12. d | 13. a | 14. a | 15. b | 16. c | 17. d | 18. a | 19. a | 20. d |
| 21. a | 22. a | 23. a | 24. a | 25. b | 26. b | 27. b | 28. d | 29. d | 30. d |
| 31. a | 32. a | 33. b | 34. c | 35. a | 36. a | 37. a | 38. a | 39. b | 40. b |
| 41. c | 42. d | 43. d | 44. c | 45. a | 46. b | 47. d | 48. a | 49. a | 50. b |
| 51. c | 52. d | 53. d | 54. b | 55. c | 56. d | 57. a | 58. b | 59. d | 60. b |
| 61. c | 62. a | 63. a | 64. b | 65. a | 66. a | 67. b | 68. b | 69. c | 70. d |
| 71. a | 72. b | 73. c | 74. d | 75. a | 76. a | 77. a | 78. b | 79. b | 80. a |
| 81. d | 82. c | 83. c | 84. b | 85. c | 86. d | 87. a | 88. b | 89. a | 90. b |
| 91. c | 92. a | 93. b | 94. a | 95. a | 96. b | 97. c | 98. c | 99. c | 100. b |
| 101. b | 102. b | 103. d | 104. a | 105. a | 106. b | 107. c | 108. b | 109. a | 110. b |
| 111. c | 112. b | 113. c | 114. d | 115. a | 116. b | 117. a | 118. b | 119. c | |

8. What is the value of $(2x + 3)(x + 6) - (2x - 5)(x + 10)$?
- (a) 50 (b) 56 (c) 68 (d) 88
9. If $\frac{1}{a} + \frac{1}{b} = \frac{1}{c}$ and $ab = c$, what is the average of a and b ?
- (a) 0 (b) $\frac{1}{2}$ (c) 3 (d) $\frac{4}{5}$
10. If $x^2 - y^2 = 28$ and $x - y = 8$, what is the average of x and y ?
- (a) 1.75 (b) 3.5 (c) 8.5 (d) 2.7
11. Which of the following is equal to $\left[\frac{1}{a} + a\right]^2 - \left[\frac{1}{a} - a\right]^2$?
- (a) 1 (b) 4 (c) $\frac{2}{5}$ (d) $2a^2$
12. If $\left[\frac{1}{a} + a\right]^2 = 100$, what is the value of $\frac{1}{a^2} + a^2$?
- (a) 72 (b) 78 (c) 98 (d) 112

ANSWERS AND EXPLANATIONS

1. Answer (c)

Evaluate: $-3(-4)^2(0.5) = -3(16)(0.5) = -24$

2. Answer (a)

 $a^2 - b^2 = (a + b)(a - b) = (7)(13) = 91$

3. Answer (b)

 $2xy = 64 - 36 = 28 \Rightarrow xy = 14$

4. Answer (a)

 $\frac{a^2 - b^2}{a - b} = \frac{(a - b)(a + b)}{(a - b)} = a + b = 117 + 118 = 235$

5. Answer (c)

To find the average, take the sum of three polynomials

and then divide by 3.

There sum is $(x^3 + 2x - 3) + (3x^2 - 2x - 3) + (30 - 4x^2) = 24$, and $24 \div 3 = 8$

6. Answer (a)

You can avoid messy, time consuming arithmetic if you recognise that $x^2 + 12x + 36 = (x + 6)^2$.

7. Answer (b)

Start by squaring $c - d$:

$$2 = (c - d)^2 = c^2 - 2cd + d^2 = c^2 + d^2 - 2cd = 4 - 2cd$$

So, $2 = 4 - 2cd \Rightarrow cd = 1$

8. Answer (c)

First multiply out both pairs of binomials.

$(2x + 3)(x + 6) = 2x^2 + 15x + 18$ and

$(2x - 5)(x + 10) = 2x^2 + 15x - 50$

Now subtract

$$(2x^2 + 15x + 18) - (2x^2 + 15x - 50) = 18 - (-50) = 68$$

9. Answer (b)

$$\frac{1}{c} = \frac{1}{a} + \frac{1}{b} = \frac{a + b}{ab} = \frac{a + b}{c} \Rightarrow 1 = a + b \Rightarrow \frac{1}{2}$$

10. Answer (a)

$x^2 - y^2 = (x - y)(x + y) \Rightarrow 28 = 8(x + y)$

$\Rightarrow x + y = 28 \div 8 = 3.5$

Finally, the average of x and y is $\frac{x + y}{2} = \frac{3.5}{2} = 1.75$

11. Answer (b)

Expand each square:

$$\left(\frac{1}{a} + a\right)^2 = \frac{1}{a^2} + 2\left(\frac{1}{a}\right)(a) + a^2 = \frac{1}{a^2} + 2 + a^2$$

$$\text{Similarly, } \left(\frac{1}{a} - a\right)^2 = \frac{1}{a^2} + 2a^2.$$

$$\text{Subtract: } \left(\frac{1}{a^2} + 2 + a^2\right) - \left(\frac{1}{a^2} - 2 + a^2\right) = 4$$

$$100 = \left(\frac{1}{a} + a\right)^2 = \frac{1}{a^2} + 2 + a^2 \Rightarrow \frac{1}{a^2} + a^2 = 98.$$

12. Answer (c)

PROBLEMS ON NUMBERS

EXERCISE

- If one-third of one-fourth of a number is 15, then three-tenth of that number is:
 - 22
 - 39
 - 47
 - 54
- Three times the first of three consecutive odd integers is 3 more than twice the third. The third integer is:
 - 2
 - 7
 - 9
 - 15
- The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?
 - 2
 - 4
 - 7
 - 15
- The difference between a two-digit number and the number obtained by interchanging the digits is 36. What is the difference between the sum and the difference of the digits of the number if the ratio between the digits of the number is 1 : 2 ?
 - 3
 - 8
 - 13
 - 16
- A two-digit number is such that the product of the digits is 8. When 18 is added to the number, then the digits are reversed. The number is:
 - 10
 - 24
 - 38
 - 98
- The sum of the digits of a two-digit number is 15 and the difference between the digits is 3. What is the two-digit number?
 - 50
 - 55
 - 92
 - Cannot be determined
- The sum of the squares of three numbers is 138, while the sum of their products taken two at a time is 131. Their sum is:
 - 20
 - 25
 - 35
 - 40
- A number consists of two digits. If the digits interchange places and the new number is added to the original number, then the resulting number will be divisible by:
 - 5
 - 7
 - 10
 - 11
- In a two-digit, if it is known that its unit's digit exceeds its ten's digit by 2 and that the product of the given number and the sum of its digits is equal to 144, then the number is:
 - 24
 - 28
 - 30
 - 33
- Find a positive number which when increased by 17 is equal to 60 times the reciprocal of the number.
 - 3
 - 7
 - 12
 - 15
- The product of two numbers is 9375 and the quotient, when the larger one is divided by the smaller, is 15. The sum of the numbers is:
 - 310
 - 350
 - 400
 - 476
- The product of two numbers is 120 and the sum of their squares is 289. The sum of the number is:
 - 18
 - 23
 - 30
 - 33
- A number consists of 3 digits whose sum is 10. The middle digit is equal to the sum of the other two and the number will be increased by 99 if its digits are reversed. The number is:
 - 210
 - 253
 - 280
 - 285
- The sum of two number is 25 and their difference is 13. Find their product.
 - 100
 - 114
 - 125
 - 186
- What is the sum of two consecutive even numbers, the difference of whose squares is 84?
 - 28
 - 33
 - 42
 - 50

ANSWERS AND EXPLANATIONS

1. Answer (d)

Let the number be x .

$$\text{Then, } \frac{1}{3} \text{ of } \frac{1}{4} \text{ of } x = 15 \Leftrightarrow x = 15 \times 12 = 180.$$

$$\text{So, required number} = \left(\frac{3}{10} \times 180\right) = 54$$

2. Answer (d)

Let the three integers be x , $x+2$ and $x+4$.

$$\text{Then, } 3x = 2(x+4) + 3 \Leftrightarrow x = 11.$$

$$\therefore \text{Third integer} = x + 4 = 15.$$

3. Answer (b)

Let the ten's digit be x and unit's digit be y .

$$\text{Then, } (10x+y) - (10y+x) = 36$$

$$\Rightarrow 9(x-y) = 36$$

$$\Rightarrow x-y = 4.$$

4. Answer (b)

Since the number is greater than the number obtained on reversing the digits, so the ten's digit is greater than the unit's digit.

Let ten's and unit's digits be $2x$ and x respectively.

$$\text{Then, } (10 \times 2x + x) - (10x + 2x) = 36$$

$$\Rightarrow 9x = 36$$

$$\Rightarrow x = 4.$$

$$\therefore \text{Required difference} = (2x+x) - (2x-x) = 2x = 8.$$

5. Answer (b)

Let the ten's and unit digit be x and $\frac{8}{x}$ respectively.

$$\text{Then, } \left(10x + \frac{8}{x}\right) + 18 = 10 \times \frac{8}{x} + x$$

$$\Rightarrow 10x^2 + 8 + 18x = 80 + x^2$$

$$\Rightarrow 9x^2 + 18x - 72 = 0$$

$$\Rightarrow x^2 + 2x - 8 = 0$$

$$\Rightarrow (x+4)(x-2) = 0$$

$$\Rightarrow x = 2.$$

6. Answer (d)

Let the ten's digit be x and unit's digit be y .

$$\text{Then, } x+y = 15 \text{ and } x-y = 3 \text{ or } y-x = 3.$$

$$\text{Solving } x+y = 15 \text{ and } x-y = 3, \text{ we get: } x = 9, y = 6.$$

$$\text{Solving } x+y = 15 \text{ and } y-x = 3, \text{ we get: } x = 6, y = 9.$$

So, the number is either 96 or 69.

Hence, the number cannot be determined.

7. Answer (a)

Let the numbers be a , b , and c .

$$\text{Then, } a^2 + b^2 + c^2 = 138 \text{ and } (ab+bc+ca) = 131.$$

$$(a+b+c)^2 = a^2 + b^2 + c^2 + 2(ab+bc+ca) = 138 + 2 \times 131 = 400.$$

$$\Rightarrow a+b+c = 20.$$

8. Answer (d)

Let the ten's digit be x and unit's digit be y .

$$\text{Then, number} = 10x+y.$$

Number obtained by interchanging the digits = $10y+x$.

$$\therefore (10x+y) + (10y+x) = 11(x+y), \text{ which is divisible by } 11.$$

9. Answer (a)

Let the ten's digit be x .

Then, unit's digit = $x+2$.

$$\text{Number} = 10x + (x+2) = 11x+2.$$

$$\text{Sum of digits} = x + (x+2) = 2x+2.$$

$$\therefore (11x+2)(2x+2) = 144$$

$$\Rightarrow 22x^2 + 26x - 140 = 0$$

$$\Rightarrow 11x^2 + 13x - 70 = 0$$

$$\Rightarrow (x-2)(11x+35) = 0$$

$$\Rightarrow x = 2.$$

$$\text{Hence, required number} = 11x + 2 = 24.$$

10. Answer (a)

Let the number be x .

$$\text{Then, } x + 17 = \frac{60}{x}$$

$$\Rightarrow x^2 + 17x - 60 = 0$$

$$\Rightarrow (x+20)(x-3) = 0$$

$$\Rightarrow x = 3.$$

11. Answer (c)

Let the numbers be x and y .

$$\text{Then, } xy = 9375 \text{ and } \frac{x}{y} = 15.$$

$$\frac{xy}{(x/y)} = \frac{9375}{15}$$

$$\Rightarrow y^2 = 625.$$

$$\Rightarrow y = 25.$$

$$\Rightarrow x = 15y = (15 \times 25) = 375.$$

$$\therefore \text{Sum of the numbers} = x + y = 375 + 25 = 400.$$

12. Answer (b)

Let the numbers be x and y .

$$\text{Then, } xy = 120 \text{ and } x^2 + y^2 = 289.$$

$$\therefore (x+y)^2 = x^2 + y^2 + 2xy = 289 + (2 \times 120) = 529$$

$$\therefore x+y = 23.$$

13. Answer (b)

Let the middle digit be x .

$$\text{Then, } 2x = 10 \text{ or } x = 5.$$

So, the number is either 253 or 352.

Since the number increases on reversing the digits, so the hundred's digit is smaller than the unit's digit.

Hence, required number = 253.

14. Answer (b)

Let the numbers be x and y .

Then, $x+y=25$ and $x-y=13$.

$$4xy = (x+y)^2 - (x-y)^2$$

$$= (25)^2 - (13)^2$$

$$= (625 - 169)$$

$$= 456$$

$$\therefore xy = 114.$$

15. Answer (c)

Let the numbers be x and $x+2$.

$$\text{Then, } (x+2)^2 - x^2 = 84$$

$$\Rightarrow 4x+4 = 84$$

$$\Rightarrow 4x = 80$$

$$\Rightarrow x = 20.$$

$$\therefore \text{The required sum} = x + (x+2) = 2x+2 = 42.$$

RATIO AND PROPORTION

1. Ratio:

The ratio of two quantities a and b in the same units, is the fraction $\frac{a}{b}$ and we write it as $a : b$. In the ratio $a : b$, we call a as the first term or **antecedent** and b , the second term or **consequent**.

Eg. The ratio $5 : 9$ represents - with antecedent = 5, consequent = 9.

Rule: The multiplication or division of each term of a ratio by the same non-zero number does not affect the ratio.

Eg. $4 : 5 = 8 : 10 = 12 : 15$. Also, $4 : 6 = 2 : 3$.

2. Proportion:

The equality of two ratios is called proportion. If $a : b = c : d$, we write $a : b :: c : d$ and we say that a, b, c, d are in **proportion**. Here a and d are called **extremes**, while b and c are called **mean terms**. Product of means = Product of extremes.

$$\text{Thus, } a : b :: c : d \Leftrightarrow (b \times c) = (a \times d).$$

EXERCISE

- A and B together have Rs. 1210. If $\frac{4}{15}$ of A's amount is equal to $\frac{2}{5}$ of B's amount, how much amount does B have?

(a) Rs. 470 (b) Rs. 484 (c) Rs. 510 (d) Rs. 515
- For every 50 rupees note Ali gives to Ahmed, he gives him back five 10 rupees notes. Ahmed gave Ali thirty-five 10 rupees notes. How many 50 rupees notes did Ali give him?

(a) 4 (b) 5 (c) 6 (d) 7
- Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:

(a) 1 : 5 (b) 2 : 5 (c) 4 : 5 (d) 5 : 8
- A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs. 1000 more than D, what is B's share?

(a) Rs. 1600 (b) Rs. 1800 (c) Rs. 2000 (d) Rs. 2500
- Seats for Mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?

(a) 2 : 3 : 4 (b) 6 : 6 : 7 (c) 6 : 7 : 8 (d) 7 : 8 : 9
- A Jar contains blue and red marbles, 20 in all. Each of the following can be in the ratio of blue to red marbles *Except*

(a) 1:1 (b) 3:2 (c) 4:1 (d) 5:1

7. In a mixture 60 litres, the ratio of milk and water 2 : 1. If the this ratio is to be 1 : 2, then the quantity of water to be further added is:
- (a) 30 litres (b) 35 litres (c) 50 litres (d) 60 litres
8. A wire of uniform density and composition weighs 16 kg. It is cut into 2 pieces. One is 30 feet and 12 kg. What is the length of the original piece?
- (a) 36 (b) 40 (c) 42 (d) 44
9. The ratio of the number of boys and girls in a college is 7 : 8. If the percentage increase in the number of boys and girls be 20% and 10% respectively, what will be the new ratio?
- (a) 10 : 12 (b) 13 : 15 (c) 21 : 22 (d) 24 : 25
10. Salaries of Rani and Sohail are in the ratio 2 : 3. If the salary of each is increased by Rs. 4000, the new ratio becomes 40 : 57. What is Sohail's salary?
- (a) Rs. 15,000 (b) Rs. 18,000 (c) Rs. 27,000 (d) Rs. 38,000
11. If $0.75 : x :: 5 : 8$, then x is equal to:
- (a) 1.14 (b) 1.20 (c) 1.18 (d) 1.25
12. The sum of three numbers is 98. If the ratio of the first to second is 2 : 3 and that of the second to the third is 5 : 8, then the second number is:
- (a) 25 (b) 30 (c) 35 (d) 40
13. If Rs. 782 be divided into three parts, proportional to $\frac{1}{2} : \frac{2}{3} : \frac{3}{4}$, then the first part is:
- (a) Rs. 170 (b) Rs. 180 (c) Rs. 198 (d) Rs. 204
14. The salaries A, B, C are in the ratio 2 : 3 : 5. If the increments of 15%, 10% and 20% are allowed respectively in their salaries, then what will be new ratio of their salaries?
- (a) 2 : 3 : 4
: 8 (b) 6 : 7 : 8 (c) 23 : 33 : 60 (d) 15 : 10
15. If 40% of a number is equal to two-third of another number, what is the ratio of first number to the second number?
- (a) 1 : 4 (b) 2 : 5 (c) 5 : 3 (d) 5 : 7
16. Two number are in the ratio 3 : 5. If 9 is subtracted from each, the new numbers are in the ratio 12 : 23. The smaller number is:
- (a) 25 (b) 33 (c) 38 (d) 45
17. In a bag, there are coins of 25 p, 10 p and 5 p in the ratio of 1 : 2 : 3. If there is Rs. 30 in all, how many 5 p coins are there?
- (a) 80 (b) 95 (c) 150 (d) 180
18. A flagstaff 17.5 m high casts a shadow of length 40.25 m. The height of the building, which casts a shadow of length 28.75 m under similar conditions will be:
- (a) 8.75 m (b) 12.5 m (c) 15.25 m (d) 20.20 m
19. If 7 spiders make 7 webs in 7 days, then 1 spider will make 1 web in how many days?
- (a) 3 (b) 5 (c) 7 (d) 21

20. 39 persons can repair a road in 12 days, working 5 hours a day. In how many days will 30 persons, working 6 hours a day, complete the work?
 (a) 8 (b) 13 (c) 17 (d) 20

Answers and Explanations

1. Answer: (b)

$$\frac{4}{15}A = \frac{2}{5}B$$

$$\Rightarrow A = \left(\frac{2}{5} \times \frac{15}{4}\right)B$$

$$\Rightarrow A = \frac{3}{2}B$$

$$\Rightarrow \frac{A}{B} = \frac{3}{2}$$

$$\Rightarrow A : B = 3 : 2.$$

$$\therefore B's \text{ share} = \text{Rs.} \left(1210 \times \frac{2}{5}\right) = \text{Rs.} 484.$$

2. Answer: (d)

(Ali / Ahmed) = (1 / 5), let x be number of 50 rupees notes

$$\text{So } (x / 35) = (1 / 5) \Rightarrow x = 7$$

3. Answer: (c)

Let the third number be x .

$$\text{Then, first number} = 120\% \text{ of } x = \frac{120x}{100} = \frac{6x}{5}$$

$$\text{Second number} = 150\% \text{ of } x = \frac{150x}{100} = \frac{3x}{2}$$

$$\therefore \text{Ratio of first two numbers} = \left(\frac{6x}{5} : \frac{3x}{2}\right) = 12x : 15x = 4 : 5$$

4. Answer: (c)

Let the shares of A, B, C and D be Rs. $5x$, Rs. $2x$, Rs. $4x$ and Rs. $3x$ respectively.

$$\text{Then, } 4x - 3x = 1000$$

$$\Rightarrow x = 1000.$$

$$\therefore B's \text{ share} = \text{Rs. } 2x = \text{Rs. } (2 \times 1000) = \text{Rs. } 2000.$$

5. Answer: (a)

Originally, let the number of seats for Mathematics, Physics and Biology be $5x$, $7x$ and $8x$ respectively.

Number of increased seats are (140% of $5x$), (150% of $7x$) and (175% of $8x$).

$$\Rightarrow \left(\frac{140}{100} \times 5x\right), \left(\frac{150}{100} \times 7x\right) \text{ and } \left(\frac{175}{100} \times 8x\right)$$

$$\Rightarrow 7x, \frac{21x}{2} \text{ and } 14x.$$

$$\therefore \text{The required ratio} = 7x : \frac{21x}{2} : 14x$$

$$\Rightarrow 14x : 21x : 28x$$

$$\Rightarrow 2 : 3 : 4.$$

6. Answer: (d)

all ratios are possible except 5:1 because the sum of $5 + 1 = 6$ which cannot be used to divide 20.

7. Answer: (d)

$$\text{Quantity of milk} = \left(60 \times \frac{2}{3}\right) \text{ litres} = 40 \text{ litres.}$$

$$\text{Quantity of water in it} = (60 - 40) \text{ litres} = 20 \text{ litres.}$$

$$\text{New ratio} = 1 : 2$$

Let quantity of water to be added further be x litres.

$$\text{Then, milk : water} = \left(\frac{40}{20 + x}\right).$$

$$\text{Now, } \left(\frac{40}{20 + x}\right) = \frac{1}{2}$$

$$\Rightarrow 20 + x = 80$$

$$\Rightarrow x = 60.$$

$$\Rightarrow \text{Quantity of water to be added} = 60 \text{ litres.}$$

8. Answer: (b)

Let x be the length of the original piece.

$$\text{So } (x / 16) = (30 / 12) \Rightarrow x = 40$$

9. Answer: (c)

Originally, let the number of boys and girls in the college be $7x$ and $8x$ respectively.

Their increased number is (120% of $7x$) and (110% of $8x$).

$$\Rightarrow \left(\frac{120}{100} \times 7x\right) \text{ and } \left(\frac{110}{100} \times 8x\right)$$

$$\Rightarrow \frac{42x}{5} \text{ and } \frac{44x}{5}$$

$$\therefore \text{The required ratio} = \left(\frac{42x}{5} : \frac{44x}{5}\right) = 21 : 22.$$

10. Answer: (d)

Let the original salaries of Rani and Sohail be Rs. $2x$ and Rs. $3x$ respectively.

$$\text{Then, } \frac{2x + 4000}{3x + 4000} = \frac{40}{57}$$

$$\Rightarrow 57(2x + 4000) = 40(3x + 4000)$$

$$\Rightarrow 6x = 68,000$$

$$\Rightarrow 3x = 34,000$$

$$\begin{aligned} \text{Sohail's present salary} &= (3x + 4000) = \text{Rs.}(34000 + 4000) \\ &= \text{Rs. } 38,000. \end{aligned}$$

11. Answer: (b)

$$(x \times 5) = (0.75 \times 8) \Rightarrow x = \left(\frac{6}{5}\right) = 1.20$$

12. Answer: (b)

Let the three parts be A, B, C. Then,

$$A : B = 2 : 3 \text{ and } B : C = 5 : 8 = \left(5 \times \frac{3}{5}\right) : \left(8 \times \frac{3}{5}\right) = 3$$

$$\frac{24}{5}$$

$$\Rightarrow A : B : C = 2 : 3 : \frac{24}{5} = 10 : 15 : 24$$

$$\Rightarrow B = \left(98 \times \frac{15}{49}\right) = 30.$$

13. Answer: (d)

$$\text{Given ratio } = \frac{1}{2} : \frac{2}{3} : \frac{3}{4} = 6 : 8 : 9.$$

$$\therefore 1^{\text{st}} \text{ part} = \text{Rs. } \left(782 \times \frac{6}{23}\right) = \text{Rs. } 204$$

14. Answer: (c)

Let $A = 2k$, $B = 3k$ and $C = 5k$.

$$\text{A's new salary} = \frac{115}{100} \text{ of } 2k = \left(\frac{115}{100} \times 2k\right) = \frac{23k}{10}$$

$$\text{B's new salary} = \frac{110}{100} \text{ of } 3k = \left(\frac{110}{100} \times 3k\right) = \frac{33k}{10}$$

$$\text{C's new salary} = \frac{120}{100} \text{ of } 5k = \left(\frac{120}{100} \times 5k\right) = 6k$$

$$\therefore \text{New ratio } \left(\frac{23k}{10} : \frac{33k}{10} : 6k\right) = 23 : 33 : 60$$

15. Answer: (c)

$$\text{Let } 40\% \text{ of } A = \frac{2}{3} B$$

$$\text{Then, } \frac{40A}{100} = \frac{2}{3} B$$

$$\Rightarrow \frac{2A}{5} = \frac{B}{3}$$

$$\Rightarrow \frac{A}{B} = \left(\frac{2}{3} \times \frac{5}{2}\right) = \frac{5}{3}$$

$$\therefore A : B = 5 : 3.$$

16. Answer: (b)

Let the numbers be $3x$ and $5x$.

$$\text{Then, } \frac{3x-9}{5x-9} = \frac{12}{23}$$

$$\Rightarrow 23(3x-9) = 12(5x-9)$$

$$\Rightarrow 9x = 99$$

$$\Rightarrow x = 11.$$

$$\therefore \text{The smaller number} = (3 \times 11) = 33.$$

17. Answer: (c)

Let the number of 25 p, 10 p and 5 p coins be x , $2x$, $3x$ respectively.

Then, sum of their value = Rs.

$$\left(\frac{25x}{100} + \frac{10 \times 2x}{100} + \frac{5 \times 3x}{100}\right)$$

$$= \text{Rs. } \frac{60x}{100}$$

$$\therefore \frac{60x}{100} = 30 \Leftrightarrow x = \frac{30 \times 100}{60} = 50.$$

Hence, the number of 5 p coins = $(3 \times 50) = 150$.

18. Answer: (b)

Let the height of the building x metres.

$$\therefore 40.25 : 28.75 :: 17.5 : x$$

$$\Leftrightarrow 40.25 \times x = 28.75 \times 17.5$$

$$x = \frac{28.75 \times 17.5}{40.25} = 12.5$$

19. Answer: (c)

Let the required number days be x .

$$\text{Spiders } 1 : 7$$

$$\text{Webs } 7 : 1 \} :: 7 : x$$

$$\therefore 1 \times 7 \times x = 7 \times 1 \times 7$$

$$\Rightarrow x = 7.$$

20. Answer: (b)

Let the required number of days be x .

$$\text{Persons } 30 : 39$$

$$\text{Working hours/day } 6 : 5 \} :: 12 : x$$

$$\therefore 30 \times 6 \times x = 39 \times 5 \times 12$$

$$\Rightarrow x = \frac{(39 \times 5 \times 12)}{(30 \times 6)}$$

$$\Rightarrow x = 13.$$

EQUATIONS AND INEQUALITIES

The basic principle that you must adhere to in solving any equation is that you can manipulate it in any way,

as long as you do the same thing to both sides. For example, you may always add the same number to each side, subtract the some number from each side, multiply or divide each side by the same number take the square of each side or take the reciprocal of each side. These comments apply to inequalities as well, except you must be careful, because some procedures, such as multiplying or dividing by a negative number and taking reciprocals, reverses equalities.

EXERCISE

- If $x - 4 = 11$, What is the value of $x - 8$?
 (a) -15 (b) -7 (c) 7 (d) 17
- If w is an integer and the average of 3, 4 and w is less than 10, what is the greatest possible value of w ?
 (a) 22 (b) 25 (c) 28 (d) 32
- For what value of x is $\frac{4}{x} + \frac{3}{5} = \frac{10}{x}$?
 (a) 5 (b) 10 (c) 15 (d) 25
- If x is positive and $y = 5x^2 + 3$, while of the following is an expression for x in terms of y ?
 (a) $\sqrt{\frac{y-3}{5}}$ (b) $\sqrt{\frac{y+3}{5}}$ (c) $\frac{\sqrt{y+3}}{5}$ (d) $\frac{\sqrt{y-3}}{5}$
- If x is positive number and $x^2 + 64 = 100$, what is the value of x ?
 (a) 6 (b) 12 (c) 36 (d) 56
- What is the largest value of x that satisfies the equation $2x^2 - 3x = 0$?
 (a) 0.5 (b) 1.5 (c) 2.5 (d) 3.5
- If $2^{x+3} = 32$, what is the value of 3^{x+2} ?
 (a) 110 (b) 90 (c) 96 (d) 81
- If $3a + 5b = 10$ and $5a + 3b = 30$, what is the average of a and b ?
 (a) 2.5 (b) 3.5 (c) 4.5 (d) 5.5
- If $4x + 12 = 36$, what is the value of $x + 3$?
 (a) 9 (b) 12 (c) 18 (d) 36
- If $7x + 10 = 44$, what is the value of $7x - 10$?
 (a) 10 (b) 12 (c) 24 (d) 38
- If $4x + 13 = 7 - 2x$, what is the value of x ?
 (a) -1 (b) -3 (c) -5 (d) -7
- If $x - 4 = 9$, what is the value of $x^2 - 4$?
 (a) 100 (b) 120 (c) 165 (d) 182
- If $ax - b = c - dx$, what is value of x in terms of a, b, c , and d ?
 (a) $\frac{c+d}{a+b}$ (b) $\frac{c-b}{a-d}$ (c) $\frac{b+c+d}{a}$ (d) $\frac{b+c}{a+d}$
- If $\frac{1}{3}x + \frac{1}{6}x + \frac{1}{9}x = 33$, what is the value of x ?
 (a) 18 (b) 36 (c) 54 (d) 66
- If $3x - 4 = 11$, what is the value of $(3x - 4)^2$?

- (a) 88 (b) 100 (c) 121 (d) 139
16. If $64^{12} = 2^{a-3}$, what is the value of a ?
 (a) 42 (b) 49 (c) 56 (d) 75
17. If average of $3a$ and $4b$ is less than 50, and a is twice b , what is the largest possible integer value of a ?
 (a) 15 (b) 19 (c) 29 (d) 39
18. If $\frac{1}{a-b} = 5$, then $a =$
 (a) $b + \frac{1}{5}$ (b) $b - \frac{1}{5}$ (c) $\frac{1-5}{b}$ (d) $b + 5$
19. If $x = 3a + 7$ and $y = 9a^2$, what is y in terms of x ?
 (a) $(x-7)^2$ (b) $(x-3)^2$ (c) $\left(\frac{x-7}{3}\right)^2$ (d) $\left(\frac{x-7}{3}\right)^2$
20. If $4y - 3x = 5$, what is the smallest integer value of x for which $y > 100$?
 (a) 110 (b) 132 (c) 138 (d) 140

Answers and Explanations

1. Answer (c)

add 4 to each side: $x = 15$. But this is not the answer. You need the value not of x , but of $x - 8$: $15 - 8 = 7$.

2. Answer (a)

Set up the inequality: $\frac{3+4+w}{3} < 10$.

get rid of fraction by multiplying by 3: $3 + 4 + w < 30$.

(combine like terms): $7 + w < 30$.

Finally, subtract 7 from each side: $w < 23$.

Since w is integer, the most it can be is 22.

3. Answer (b)

Multiply each side by 5x:

$$5x\left(\frac{4}{x}\right) + 5x\left(\frac{3}{5}\right) = 5x\left(\frac{10}{x}\right) \Rightarrow 20 + 3x = 50$$

Now solve normally. $20 + 3x = 50 \Rightarrow 3x = 30 \Rightarrow x = 10$

4. Answer (a)

$$y = 5x^2 + 3 \Rightarrow y - 3 = 5x^2 \Rightarrow \frac{y-3}{5} = x^2$$

Now take the square root of each side; since x is

positive, the only solution is $x = \sqrt{\frac{y-3}{5}}$

5. Answer (a)

$$x^2 + 64 = 100 \Rightarrow x^2 = 36 \Rightarrow x = \sqrt{36} = 6$$

6. Answer (b)

$$2x^2 - 3 = 0 \Rightarrow x(2x - 3) = 0$$

$$x = 0 \text{ or } 2x - 3 = 0$$

$$x = 0 \text{ or } 2x = 3$$

$$x = 0 \text{ or } x = 1.5$$

7. Answer (d)

$$2^x + 3 = 32 = 2^5 \Rightarrow x + 3 = 5 \Rightarrow x = 2.$$

Therefore, $x + 2 = 4$,

$$\text{and } 3^{x+2} = 3^4 = 3 \times 3 \times 3 \times 3 = 81$$

8. Answer (a)

Add the two equations: $3a + 5b = 10$

$$+ 5a + 3b = 40$$

$$\hline 8a + 8b = 50$$

Divide both sides by 8: $a + b = 5$

The average of a and b is: $\frac{a+b}{2} = \frac{5}{2} = 2.5$

9. Answer (a)

The easiest method is to recognise that $x + 3$ is $\frac{1}{4}$ of

$4x + 12$ and, therefore, equals $\frac{1}{4}$ of 36, which is 9. If

you don't see that, solve normally:

$$4x + 12 = 36 \Rightarrow 4x = 24 \Rightarrow x - 6 \Rightarrow x + 3 = 9$$

10. Answer (c)

Subtracting 20 from each side of $7x + 10 = 44$ gives $7x - 10 = 24$. If you don't see that, subtract 10 from each side, getting $7x = 34$. The worst alternative is to divide both sides of $7x = 34$ by 7 to get $x = \frac{34}{7}$, then you have to multiply by 7 to get back to 34, and then subtracting 10.

11. Answer (a)

Add $2x$ to each side: $6x + 13 = 7$.

$$\Rightarrow x = -1$$

12. Answer (c)

$$x - 4 = 9 \Rightarrow x = 13 \Rightarrow x^2 = 169 \Rightarrow x^2 - 4 = 165.$$

13. Answer (d)

Treat a , b , c and d as constants and solve for x :

$$ax - b = c - dx \Rightarrow ax - b + dx = c$$

$$\Rightarrow ax + dx = c + b \Rightarrow x(a + d) = b + c$$

$$\Rightarrow x = \frac{b + c}{a + d}$$

14. Answer (c)

Multiply both sides by 18, then L. C. D.

$$18\left(\frac{1}{3}x + \frac{1}{6}x + \frac{1}{9}x\right) = 18(33)$$

$$\Rightarrow 6x + 3x + 2x = 594$$

$$\Rightarrow 11x = 594$$

$$\Rightarrow x = 54$$

15. Answer (c)

Since you are given the value of $3x - 4$, and want the value of $(3x - 4)^2$, just square both sides: $11^2 = 121$.

If you don't see that, you will waste time solving $3x - 4 = 11$ ($x = 5$), only to use that value to calculate that $3x - 4$ is equal to 11, which you already knew.

16. Answer (d)

$$2^a - 3 = 64^{12} = (2^6)^{12} = 2^{72} \Rightarrow a - 3 = 72 \Rightarrow a = 75$$

17. Answer (b)

Since $a = 2b$, $2a = 4b$. Therefore, the average of $3a$ and $4b$ is the average of $3a$ and $2a$, which is $2.5a$. Therefore, $2.5a < 50 \Rightarrow a < 20$. So, the largest integer value of a is 19.

18. Answer (a)

Taking the reciprocal of each side, we get.

$$a - b = \frac{1}{5} \text{ So } a = b + \frac{1}{5}$$

19. Answer (a)

$$x = 3a + 7 \Rightarrow x - 7 = 3a \Rightarrow a = \frac{x - 7}{3}$$

$$\text{Therefore, } y = 9a^2 = 9 \left(\frac{x - 7}{3}\right)^2 = 9 \frac{(x - 7)^2}{(3)^2} = (x - 7)^2$$

20. Answer (b)

First solve for y in terms of x :

$$4y - 3x = 5 \Rightarrow 4y = 5 + 3x \Rightarrow y = \frac{5 + 3x}{4}$$

Then, since $y > 100$.

$$\frac{5 + 3x}{4} > 100 \Rightarrow x > 131.666$$

The smallest integer value of x is 132.

BASIC ARITHMETIC

DECIMALS AND FRACTIONS

A fraction represents a part of a whole or, more generally, any number of equal parts. When spoken in everyday English, a fraction describes how many parts of a certain size there are, for example, one-half, eight-fifths, three-quarters. A common fraction such as $\frac{1}{2}$, $\frac{8}{5}$, $\frac{3}{4}$, consists of an integer numerator and a non-zero integer denominator - the numerator representing a number of equal parts and the denominator indicating how many of those parts make up a whole. An example is $\frac{3}{4}$, in which the numerator, 3, tells us that the fraction represents 3 equal parts, and the denominator, 4, tells us that 4 parts equal a whole.

Fractions in which denominators are powers of 10 are known as decimal fractions. Thus, $\frac{1}{10} = 1 \text{ tenth} = 0.1$;

$\frac{1}{100} = 1 \text{ hundredth} = 0.01$; $\frac{99}{100} = 99 \text{ hundredths} = 0.99$; $\frac{7}{1000} = 7 \text{ thousandths} = 0.007$, etc.

EXERCISE

- The fraction $101 \frac{27}{100000}$ in decimal form is:
 (a) 101.00027 (b) 101.0027 (c) 101.027 (d) 101.27
- When .36 is written in simplest fractional form, the sum of numerator and the denominator is:
 (a) 10 (b) 34 (c) 20 (d) 25
- What is the difference between the biggest and the smallest fraction among $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$ and $\frac{5}{6}$?
 (a) $\frac{1}{6}$ (b) $\frac{1}{12}$ (c) $\frac{1}{20}$ (d) $\frac{1}{30}$
- Which of the following fractions is the smallest?
 (a) $\frac{13}{16}$ (b) $\frac{15}{19}$ (c) $\frac{17}{21}$ (d) $\frac{7}{8}$
- $12.1212 + 17.0005 - 9.1102 = ?$
 (a) 20.15 (b) 20.0105 (c) 20.0015 (d) 20.0115
- $892.7 - 573.07 - 95.007 = ?$
 (a) 224.623 (b) 224.777 (c) 233.523 (d) 414.525
- $0.002 \times 0.5 = ?$
 (a) 0.0001 (b) 0.001 (c) 0.01 (d) 0.1
- $16.02 \times 0.001 = ?$
 (a) 0.001602 (b) 0.01602 (c) 0.1602 (d) 1.6002
- $\left[.00625 \text{ of } \frac{23}{5} \right]$, when expressed as a fraction, equals:
 (a) $\frac{23}{80}$ (b) $\frac{23}{800}$ (c) $\frac{23}{8000}$ (d) $\frac{125}{28}$

10. $0.213 \div 0.00213 = ?$
 (a) 1 (b) 10 (c) 100 (d) 1000
11. 4.036 divided by 0.04 gives.
 (a) 1.009 (b) 10.09 (c) 100.9 (d) 1000.9
12. $\frac{1}{0.04}$ is equal to:
 (a) $\frac{1}{40}$ (b) $\frac{2}{5}$ (c) 2.5 (d) 25
13. 0.36 expressed in the form of $\frac{p}{q}$ equal:
 (a) $\frac{9}{25}$ (b) $\frac{4}{13}$ (c) $\frac{4}{23}$ (d) $\frac{35}{99}$
14. The value of 2.136 is:
 (a) $2\frac{10}{19}$ (b) $2\frac{68}{295}$ (c) $2\frac{3}{22}$ (d) $2\frac{17}{125}$
15. If $213 \times 16 = 3408$, then 1.6×21.3 is equal to:
 (a) 0.3408 (b) 3.408 (c) 34.08 (d) 340.8

ANSWERS AND EXPLANATIONS

1. Answer (a)

$$101\frac{27}{100000} = 101 + \frac{27}{100000} = 101 + .00027 = 101.00027$$

2. Answer (b)

$$0.36 = \frac{36}{100} = \frac{9}{25}$$

Sum of Numerator and Denominator = $9 + 25 = 34$.

3. Answer (a)

Convert each of the given fractions into decimal form:

$$\frac{2}{3} = 0.66, \frac{3}{4} = 0.75, \frac{4}{5} = 0.8, \frac{5}{6} = 0.833$$

Since $0.833 > 0.8 > 0.75 > 0.66$, so $\frac{5}{6} > \frac{4}{5} > \frac{3}{4} > \frac{2}{3}$

$$\text{Required difference} = \left(\frac{5}{6} - \frac{2}{3}\right) = \frac{1}{6}$$

4. Answer (b)

$$\text{We have } \frac{13}{16} = 0.8125, \frac{15}{19} = 0.7894, \frac{17}{21} = 0.8095$$

$$\text{and } \frac{7}{8} = 0.875.$$

5. Answer (d)

$$\text{Given expression} = (12.1212 + 17.0005) - 9.1102$$

$$= (29.1217 - 9.1102) = 20.$$

0115.

6. Answer (a)

$$\begin{aligned} \text{Give expression} &= 892.7 - (573.07 - 95.007) \\ &= 892.7 - 668.077 = 224.623 \end{aligned}$$

7. Answer (b)

$$2 \times 5 = 10, \text{ sum of decimal places} = 4$$

$$0.002 \times 0.5 = 0.0010 = 0.001.$$

8. Answer (b)

$$1602 \times 1 = 1602.$$

$$\text{Sum of decimal places} = 5$$

$$1602 \times 0.001 = 0.01602$$

9. Answer (b)

$$\left(.00625 \text{ of } \frac{23}{5}\right) = \frac{625}{100000} \times \frac{23}{5} = \frac{23}{800}$$

10. Answer (c)

$$\frac{0.213}{0.00213} = \frac{0.213 \times 100000}{0.00213 \times 100000} = \frac{213 \times 100}{213} = 100$$

11. Answer (c)

$$\frac{4.036}{0.04} = \frac{403.6}{4} = 100.9$$

12. Answer (d)

$$\frac{1}{0.04} = \frac{100}{4} = 25$$

13. Answer (a)

$$0.36 = \frac{36}{100} = \frac{4}{25}$$

14. Answer (d)

$$2.136 = 2 + 0.136 = 2 + \frac{136}{1000} = 2 + \frac{17}{125} = 2$$

$$\frac{17}{125}$$

15. Answer (c)

$$1.6 \times 21.3 = \left(\frac{16}{10} + \frac{213}{10}\right) = \left(\frac{16 \times 213}{100}\right) = \frac{3408}{100} = 34.08$$

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PERCENTAGE

By a certain *percent*, we mean that many hundredths. Thus, x percent means x hundredths, written as $x\%$.

To express $x\%$ as a fraction: We have, $x\% = \frac{x}{100}$.

$$\text{Thus, } 50\% = \frac{50}{100} = \frac{1}{2}$$

To express $\frac{a}{b}$ as a percent: We have, $\frac{a}{b} = \left(\frac{a}{b} \times 100\%\right)$

$$\text{Thus, } \frac{1}{4} = \left(\frac{1}{4} \times 100\%\right) = 25\%$$

Example: If 500 is reduced by 25% what is the new value?

Explanation: Let x be new value. So $x = 500 - (25\% \text{ of } 500) \Rightarrow x = 500 - 100 = 400$

EXERCISE

- A batsman scored 120 runs which included 9 boundaries and 4 sixes. What percent of his total score did he make by running between the wickets?
 - 45%
 - 50%
 - 55%
 - 60%
- 65% of a number is 21 less than four fifth of that number. What is the number?
 - 100
 - 120
 - 140
 - 160
- Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are:
 - 28, 30
 - 33, 36
 - 42, 33
 - 40, 44
- In an election between two candidates, 75% of the voters cast their votes, out of which 2% of the votes were declared invalid. A candidate got 9261 votes which were 75% of the total valid votes. Find the total number of votes enrolled in that election.
 - 16800
 - 17000
 - 17200
 - 17500
- A fruit seller had some apples. He sells 40% apples and still has 420 apples. Originally, he had:
 - 300 apples
 - 400 apples
 - 500 apples
 - 700 apples
- How many kg of pure salt must be added to 30kg of 2% solution of salt and water to increase it to 10% solution?

- (a) $5/2$ (b) $7/5$ (c) $8/5$ (d) $8/3$
7. Three candidates contested an election and received 1136, 7636 and 11628 votes respectively. What percentage of the total votes did the winning candidate get?
(a) 57% (b) 65% (c) 68% (d) 80%
8. In a certain school, 20% of students are below 8 years of age. The number of students above 8 years of age is two third of the number of students of 8 years of age which is 48. What is the total number of students in the school?
(a) 65 (b) 74 (c) 100 (d) 110
9. Two numbers A and B are such that the sum of 5% of A and 4% of B is two-third of the sum of 6% of A and 8% of B. Find the ratio of A : B.
(a) 1 : 2 (b) 2 : 2 (c) 3 : 5 (d) 4 : 3
10. Two trailers X and Y are paid a total of Rs. 550 per week by their employer. If X is paid 120 percent of the sum paid to Y, how much is Y paid per week?
(a) Rs. 120 (b) Rs. 250 (c) Rs. 280 (d) Rs. 320
11. If $A = x\%$ of y and $B = y\%$ of x , then which of the following is true?
(a) A is smaller than B. (b) A is greater than B
(c) $A = B$ (d) Relationship between A and B cannot be determined.
12. What percentage of numbers from 1 to 70 have 1 or 9 in the unit's digit?
(a) 2% (b) 16% (c) 20% (d) 33%
13. If 20% of $a = b$, then $b\%$ of 20 is the same as:
(a) 4% of a (b) 7% of a (c) 12% of a (d) 25% of a
14. If the numerator of a fraction be increased by 15% and its denominator be diminished by 8% , the value of the fraction is $15/16$. Find the original fraction.
(a) $2/3$ (b) $3/4$ (c) $5/4$ (d) $6/5$
15. Amir's mathematics test had 75 problems i.e. 10 arithmetic, 30 algebra and 35 geometry problems. Although he answered 70% of the arithmetic, 40% of the algebra, and 60% of the geometry problems correctly. He did not pass the test because he got less than 60% of the problems right. How many more questions he would have to answer correctly to earn 60% of the passing grade?
(a) 3 (b) 4 (c) 5 (d) 6

ANSWERS AND EXPLANATIONS

1. Answer (b)

No. of runs made by running = $120 - (9 * 4 + 4 * 6) = 60$

So, required percentage = $(60/120) * 100 = 50\%$

2. Answer (c)

Let the number be x .

Then, $(4 * x / 5) - (65\% \text{ of } x) = 21$

$$\Rightarrow (4 * x / 5) - (65x / 100) = 21$$

$$\Rightarrow 5x = 2100$$

$$\Rightarrow x = 140.$$

3. Answer (c)

Let their marks be $(x + 9)$ and x .

Then, $x + 9 = 56\% \text{ of } (x + 9 + x)$

$$\Rightarrow 25(x + 9) = 14(2x + 9)$$

$$\Rightarrow 3x = 99$$

$$\Rightarrow x = 33$$

So, their marks are 42 and 33.

4. Answer (a)

Let the number of votes enrolled be x .

Then, No. of votes cast = 75% of x .

Valid votes = 98% of (75% of x).

75% of (98% of (75% of x)) = 9261.

$$[(75/100) \times (98/100) \times (75/100) \times x] = 9261.$$

$$x = [(9261 \times 100 \times 100 \times 100) / (75 \times 98 \times 75)] = 16800.$$

5. Answer (d)

Suppose originally he had x apples.

Then, $(100 - 40)\%$ of $x = 420$.

$$\Rightarrow \frac{60}{100} \times x = 420$$

$$\Rightarrow x = \left(\frac{420 \times 100}{60} \right) = 700$$

6. Answer (d)

Amount of salt in 30kg sol. = $[(2/100) \times 30] \text{ kg} = 0.6 \text{ kg}$

Let x kg of pure salt be added

Then, $(0.6 + x) / (30 + x) = 10 / 100$

$$\Rightarrow 60 + 100x = 300 + 10x$$

$$\Rightarrow 90x = 240 \Rightarrow x = 8/3.$$

7. Answer (a)

no. of votes polled $\approx (1136 + 7636 + 11628) = 20400$.

$$\therefore \text{Required percentage} = \left(\frac{11628}{20400} \times 100\% \right) = 57\%$$

8. Answer (c)

Let the number of students be x .

Then, Number of students above 8 years of age =

$$(100 - 20)\% \text{ of } x = 80\% \text{ of } x.$$

$$\therefore 80\% \text{ of } x = 48 + \frac{2}{3} \text{ of } 48$$

$$\Rightarrow \frac{80}{100}x = 80$$

$$\Rightarrow x = 100.$$

9. Answer (d)

5% of A + 4% of B = $\frac{2}{3}$ (6% of A + 8% of B)

$$\Rightarrow \frac{5}{100}A + \frac{4}{100}B = \frac{2}{3} \left(\frac{6}{100}A + \frac{8}{100}B \right)$$

$$\Rightarrow \frac{1}{20}A + \frac{1}{25}B = \frac{1}{25}A + \frac{4}{75}B$$

$$\Rightarrow \left(\frac{1}{20} - \frac{1}{25} \right)A = \left(\frac{4}{75} - \frac{1}{25} \right)B$$

$$\Rightarrow \frac{1}{100}A = \frac{1}{75}B$$

$$\frac{A}{B} = \frac{100}{75} = \frac{4}{3}$$

\therefore Required ratio = 4 : 3

10. Answer (b)

Let the sum paid to Y per week be Rs. z .

Then, $z + 120\%$ of $z = 550$.

$$\Rightarrow z + \frac{120}{100}z = 550$$

$$\Rightarrow \frac{11}{5}z = 550$$

$$\Rightarrow z = \left(\frac{550 \times 5}{11} \right) = 250.$$

11. Answer (c)

$x\%$ of $y = \left(\frac{x}{100} \times y \right) = \left(\frac{y}{100} \times x \right) = y\%$ of x

$$\therefore A = B$$

12. Answer (c)

Clearly, the numbers which have 1 or 9 in the unit's digit, have squares that end in the digit 1. Such numbers from 1 to 70 are 1, 9, 11, 19, 21, 29, 31, 39, 41, 49, 51, 59, 61, 69.

Number of such number = 14

$$\therefore \text{Required percentage} = \left(\frac{14}{70} \times 100 \right) \% = 20\%.$$

13. Answer (a)