

21. Speed of sound is greater in solids than in liquids because
- The atoms in solids are regularly arranged
 - The atoms in liquids are loosely packed
 - The solids have high elasticity
 - None of the above.
22. Optic fibres are mainly used for which of the following?
- Communication
 - Weaving
 - Musical instruments
 - Food industry
23. Who is considered the father of sahatara (Sitar)?
- Mian Tansen
 - Baiju Bawara
 - Amir Khusro
 - Bade Ghulam Ali Khan
24. Which of the following was adopted from the Maurya dynasty in the emblem of Government of India?
- Four Lions
 - Chariot Wheel
 - Horse
 - Words 'Satyameva Jayate'
25. Who among the following is known as the Father of the Indian Constitution?
- Dr B.R. Ambedkar
 - Mahatma Gandhi
 - Jawaharlal Nehru
 - Vallabhai Patel
26. During sleep a man's blood pressure
- increases
 - decreases
 - remains constant
 - fluctuates
27. The pitch of the voice of the women is generally
- same as that of men
 - higher than that of men
 - much lower than that of men
 - None of the above
28. Which among the following formulates fiscal policy?
- RBI
 - Finance Ministry
 - SEBI
 - Planning Commission
29. Economic survey is published by
- Ministry of Finance
 - Planning commission
 - Government of India
 - Indian Statistical Institute

30. The capital of Cholas was
a) Badami b) Tanjore c) Delhi d) Mahabalipuram
31. The 'Battle of Ten Kings' was fought on the banks of
a) Asikini (Chenab) b) Parushni (Ravi)
c) Vitasta (Jhelum) d) Vipas (Beas)
32. Upanishads are books on
a) Religion b) Yoga c) Law d) Philosophy
33. Who was the first sultan of Delhi to introduce the practice of 'Sijda'?
a) Firoz Tughlaq b) Alauddin Khilji
c) Balban d) Mohammad Bin Tughlaq
34. The 'Shahnama' was written by
a) Alberuni b) Firdausi c) Amir Khusrau d) Abul Fazal
35. Who was the leader of Poona Sarvajanik Sabha founded in 1870?
a) S N Banerjee b) Justice Ranade
c) K T Telang d) Firozshah Mehta
36. Which part of the earth's surface receives the highest amount of insolation?
a) Tropical deserts b) Equatorial region
c) Savanna region d) No such criteria
37. The Vindhyas belong to which class of mountains?
a) Block mountains b) Fold mountains
c) Volcanic mountains d) Residual mountains
38. Who among the following was a great ruler of Kalinga in ancient times?
a) Ajatasatru b) Bindusara c) Kharavela d) Mayurasarma
39. Hieun Tsang, the chinese traveller, visited India during the period of
a) Ashoka b) Chandragupta Vikramaditya
c) Harsha d) Kumargupta
40. Dronacharya Award is given to
a) fire fighting operation
b) archery
c) outstanding coaching in sports and games
d) outstanding coaching in athletics

41. The system of open competitions through examinations for entering the civil service was introduced in
a) 1813 b) 1833 c) 1853 d) 1858
42. Which of the following was the founder of 'Prarthana Samaj'?
a) Devendra Nath Tagore b) Mahadeo Govind Ranade
c) Keshab Chandra Sen d) G K Devdhar
43. The first person to conduct heart transplantation in India is
a) Dr PKK Ayyangar b) Dr R Valiathan
c) Dr Venugopal d) DR R Kesavan Nair
44. The ruler who was the first to establish a ministry of agriculture was
a) Alauddin Khilji b) Mohammad Bin Tughlaq
c) Sher Shah d) Akbar
45. In how many time zones has the world been divided?
a) 15 b) 24 c) 90 d) 180
46. Which one of the following elements is most abundant in the earth's crust?
a) Oxygen b) Sulphur c) Silicon d) Carbon
47. All the watches of a country are set according to
a) local time b) standard time of the country
c) greenwich mean time d) time of sunrise and sunset
48. The length of India's coastline is about
a) 5900 km b) 6100 km c) 7000 km d) 7500 km
49. Tansen Sanman is given by the Government of
a) Uttar Pradesh b) Gujarat
c) Maharashtra d) Madhya Pradesh
50. Which one of the following is not an official language of the United Nations Organisation?
a) Arabic b) Russian c) Chinese d) German
51. Each member of a Picnic party contributed twice as many rupees as the total collection was Rs.3042. The number of members present in the party was
a) 2 b) 32 c) 42 d) 39

52. The product of two number is 4107. If the HCF of the number is 37. The greatest number is
 a) 185 b) 111 c) 107 d) 101
53. When simplified, the expression
 $(100)^{1/2} \times (0.001)^{1/3} - (0.0016)^{1/4} \times 3^0 + \left(\frac{1}{4}\right)^{5^{-1}}$ is equal to
 a) 1.6 b) 0.8 c) 1.0 d) 0
54. $\left(\frac{785 \times 785 \times 785 + 435 \times 435 \times 435}{(785)^2 + (435)^2 - (785)(435)}\right)$ Simplifies to
 a) 350 b) 785 c) $1\frac{20}{1} - \frac{1}{\dots}$ d) $1\frac{320}{1}$ becomes
5. When simplified the product $\left(1 - \frac{1}{3}\right) \left(\frac{\quad}{4}\right) \left(\frac{\quad}{5}\right) \left(\frac{\quad}{n}\right)$
 a) $\frac{1}{n}$ b) $\frac{2}{n}$ c) $\frac{2(n-1)}{n}$ d) $\frac{2}{n(n+1)}$
6. The greatest number which when divided by 989 and 1327 leaves remainder 5 and 7 respectively is
 a) 8 b) 16 c) 24 d) 32
7. A milkman has 75 L milk in one can and 45 L in another. The maximum capacity of container which can measure milk of either container exact number of times, is
 a) 1 L b) 5 L c) 15 L d) 25 L
8. The average of five numbers is 27. If one number is excluded. The average becomes 25. The excluded number is
 a) 25 b) 27 c) 30 d) 35
9. The average of the marks obtained in an examination by 8 students was 51 and by 9 other students was 68. The average marks of the 17 students was
 a) 59 b) 59.5 c) 60 d) 60.5
10. The sum of the present ages of Varun and Kapil is 42 years. The ratio of their ages after 5 Years will be 15 : 11. What is the present age of Kapil?
 a) 17 years b) 24 years c) 25 years d) 22 years

6. A bag contains Rs.90 in coins of denominations of 50 paise, 25 paise and 10 paise. If coins of 50 paise, 25 paise and 10 paise are in ratio 2 : 3 : 5, then the number of 25 paise coins in the bag is
 a) 80 b) 120 c) 100 d) 135
8. If the volumes of two cubes are in the ratio 27 : 64 and then the ratio of their total surface are is
 a) 27 : 64 b) 3 : 4 c) 9 : 16 d) 3 : 8
8. A and B can do a work in 18 and 24 days respectively. They worked together for 8 days and then A left. The remaining work was finished by B in
 a) 5 days b) $5\frac{1}{3}$ days c) 8 days d) 10 days
6. A and B can do a work in 12 days, B and C in 15 days, C and A in 20 days. If A, B and C work together, they will complete the work in
 a) 5 days b) $7\frac{5}{6}$ days c) 10 days d) $15\frac{2}{3}$ days
6. If 12 men and 16 boys can do a piece of work in 5 days; 13 men and 24 boys can do it in 4 days, then the ratio of the daily work done by a man to that of a boy is
 a) 2 : 1 b) 3 : 1 c) 2 : 2 d) 5 : 4
6. If 50% of $(x - y) = 30%$ of $(x + y)$, then what percent of x is y ?
 a) 25% b) $33\frac{1}{3}$ % c) 40% d) 400%
8. If the sales tax be reduced from $3\frac{1}{2}$ % to $3\frac{1}{3}$ %, what difference does it make to person who purchases an article whose marked price is Rs.8400?
 a) Rs.20 b) Rs.15 c) Rs.14 d) Rs.10
8. A man sold 18 cots for Rs.16800, gaining there by the cost price of 3 cots. The cost price of a cot is
 a) Rs.600 b) Rs.800 c) Rs.900 d) Rs.1000
69. The selling price of 5 articles is the same as the cost price of 3 articles. The gain or loss is
 a) 20% gain b) 25% gain c) 33.33% loss d) 40% loss
70. Dilip, Ram and Amar started a shop by investing Rs.2700, Rs.8100 and Rs.7200 respectively. At the end of 1 yr, the profit was distributed. If Ram's share was Rs.3600, their total profit was
 a) Rs.10800 b) Rs.11600 c) Rs.8000 d) None of these

71. In what time will the simple interest be $\frac{2}{5}$ of the principal at 8% per annum?
 a) 8 years b) 7 years c) 5 years d) 6 years
72. A sum of Rs.1600 gives a simple interest of Rs.252 in 2 years and 3 months. The rate of interest per annum is
 a) $5\frac{1}{2}$ b) 8% c) 7% d) 6%
73. The difference between the simple interest and the compound interest (compounded annually) at the rate of 12% per annum on Rs.5000 for 2 years will be
 a) Rs.17.50 b) Rs.36 c) Rs.45 d) Rs.72
74. If the compound interest on a certain sum for two consecutive years is Rs.220 and Rs.242, then the rate of interest per annum is
 a) 8% b) 10% c) 11% d) 12%
75. The perimeter of two squares are 40 cm and 32 cm. The perimeter of a third square whose area is the difference of the area of two square, is
 a) 24 cm b) 42 cm c) 40 cm d) 20 cm
76. The area of square field is 69696 m^2 . Its diagonal will be equal to (use $\sqrt{2} = 1.414$)
 a) 313.296 m b) 353.296 m c) 373.296 m d) 393.296 m
77. The volume of a cube is 512 cm^3 . Its surface area (in sq cm) is
 a) 284 b) 384 c) 484 d) 576
78. The wooden box measure 20 cm by 12 cm by 10 cm. Thickness of wood is 1 cm. The volume of wood to make the box (in cubic cm) is
 a) 960 b) 519 c) 2400 d) 1.120
79. A hollow iron pipe is 21 cm long and its exterior diameter is 8 cm. If the thickness of the pipe is 1 cm and iron weights 8 g/cm^3 , then the weight of the pipe (take $\pi = \frac{22}{7}$) is.
 a) 3.696 kg b) 3.6 kg c) 36 kg d) 36.9 kg
80. The height of a wall is six times its width and the length of the wall is seven times its height. If volume of the wall be 16128 cube m, its width is
 a) 5m b) 4m c) 4.5m d) 6m

Directions (Q. 81-82): Read the following information carefully and answer the questions given below it.

- i) A, B, C, D, E and F-six friends are sitting in a circle facing the centre.

- ii) E is to the immediate left of D.
- iii) C is sitting between A and B.
- iv) F is sitting between E and A.

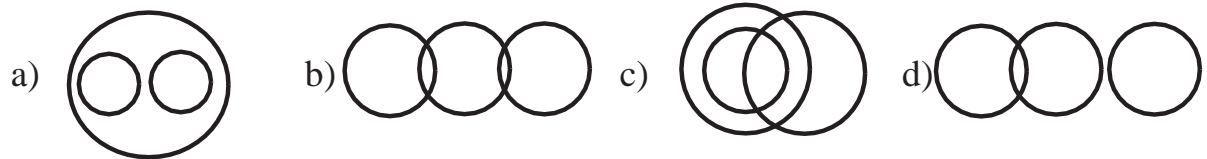
81. Who is to the immediate right of C?

- a) F
- b) E
- c) A
- d) B

82. Who is to the immediate left of B?

- a) D
- b) E
- c) C
- d) A

83. Which of the following diagrams correctly represents Elephants, Wolves, Animals.



84. Ravi is 7 ranks ahead of Sumit in a class of 39. If Sumit's rank is seventeenth from the last, what is Ravi's rank from the start?

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

85. In a certain code language 'CAT' is written as 'DDY'. How will 'BIG' be written in that code?

- a) CML
- b) CJL
- c) CLL
- d) CNL

Directions (Q. 86-88): In each of the following questions, there is a certain relationship between two given words on one side of :: and one word is given on another side of :: while another word is to be selected from the given alternatives, having the same relationship with this word as the words of the given pair bear. Choose the correct alternative.

86. Malaria : Disease : : Spear : ?

- a) Wound
- b) Sword
- c) Weapon
- d) Death

87. Food : Stomach : : Fuel : ?

- a) Plane
- b) Truck
- c) Engine
- d) Automobile

88. Fire : Ashes :: Explosion : ?

- a) Flame
- b) Death
- c) Sound
- d) Debris

Directions (Q. 89-91): In each of the following questions, four words have been given out of which three are alike in a certain way and one is different. Choose out the odd one.

89. a) Cupboard b) Chair c) Paper weight d) Sofa

90. a) Swim b) Listen c) Climb d) Run

91. a) Needle b) Nail c) Hammer d) Screw

Directions (Q. 92-93): In each of the following letter series, some of the letters are missing which are given in that order as one of the alternatives below it.

92. ab ---b -bbaa -

- a) abaab b) abbab c) baaab d) babba

93. -bcdbc -dcabd -bedbc -dc -bd

- a) aaaaa b) ccccc c) bbbbb d) ddddd

Directions (Q. 94 - 97): In each of the following questions, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and fill in the blank spaces.

94. 121, 225, 361, (.....)

- a) 441 b) 484 c) 529 d) 729

95. 19, 2, 38, 3, 114, 4, (.....)

- a) 228 b) 256 c) 352 d) 456

96. 3, 6, 18, 72, (....)

- a) 144 b) 216 c) 288 d) 360

97. 21, 25, 33, 49, 81, (.....)

- a) 145 b) 129 c) 113 d) 97

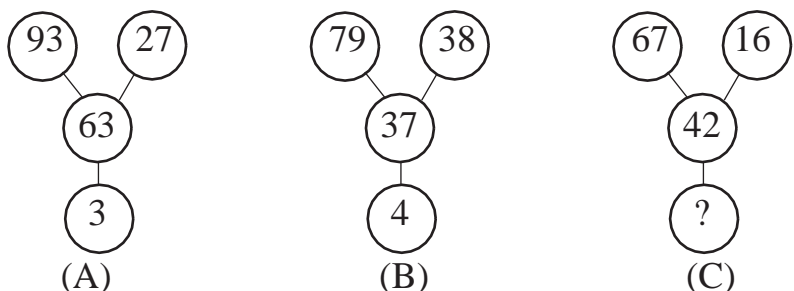
98. After walking 6 km, I turned right and covered a distance of 2 km, then turned left and covered a distance of 10 km. In the end, I was walking towards the East. From which direction did I start my journey?

- a) North b) South c) East d) West

99. 'Q's mother is sister of P and daughter of M. S is daughter of P and sister of T. How is M related to T?

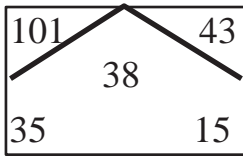
- a) Grandmother b) Father
c) Grandfather d) Grandfather of grandmother

Directions (Q. 100-101): Find the missing character in the following questions.

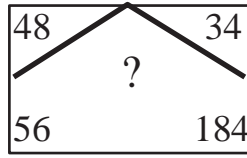
100. 

a) 5 b) 6 c) 8 d) 9

101.



(A)



(B)

- a) 127 b) 142 c) 158 d) 198

102. If 3rd December, 1990 is Sunday. What day is 3rd January, 1991?

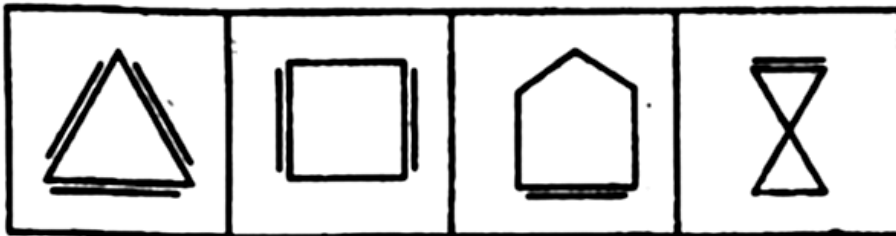
- a) Tuesday b) Wednesday c) Thursday d) Friday

103. Ajay left home for the bus stop 5 min earlier than usual. It takes 10 min to reach the stop. He reached the stop at 8.40 am. What time does he usually leave home for the bus stop?

- a) 8.30 am b) 8.45 pm c) 8.55am d) 8.45am

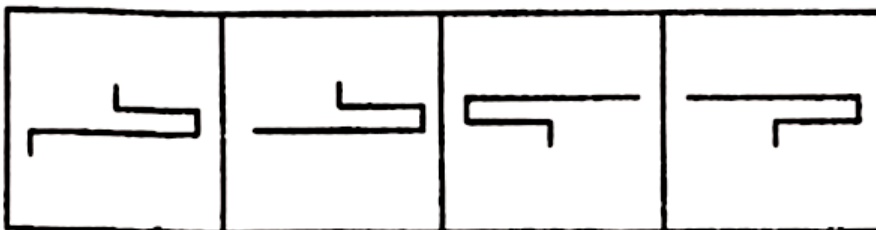
Directions (Q. 104-105): In the following questions, choose the figure which is different from the other three.

104.



(a) (b) (c) (d)

105.



(a) (b) (c) (d)

Directions (Q. 106-108): Find out the part which has an error in the following sentences. If there is no error, your answer is (d)

106. Neither Sunil nor I (a)/ are leaving (b)/ for Mumbai. (c)/ No error (d)
 107. The rest of the students (a)/ is still working (b)/ in the classroom. (c)/ No error (d)
 108. He don't know (a)/ the difference between (b)/ a ship and a submarine. (c)/ No error (d)

Directions (Q. 109-111): In the following questions, choose the word same in mean-

ing of the word given in **bold** letters.

109. Bonhomie

- a) Friendliness b) Wrath c) Very d) Greed

110. Candour

- a) Enthusiasm b) Openness c) Freedom d) Intimacy

111. Bashful

- a) Haughty b) Discreet c) Shy d) Upset

Directions (Q. 112-114): In the following questions, choose the word opposite in meaning of the word given in bold letters.

112. Pertinent

- a) Appropriate b) Pleasant c) Extraneous d) Paltry

113. Meticulous

- a) Inappropriate b) Sloppy
c) Robust d) Gullible

114. Wanton

- a) Sportive b) Ardent c) Fragile d) Discreet

Directions (Q. 115-117): Choose the alternative which can be substituted for the given words/sentence.

115. That which cannot be done without

- a) Irrevocable b) Impracticable
c) Indispensable d) Impossible

116. A cure for all diseases.

- a) Exorcism b) Incantation c) Panacea d) Antibiotic

117. One who travels from place to place

- a) Itinerant b) Mendicant
c) Journeyman d) Tramp

Directions (Q. 118-120): In the following questions, choose the alternative which is an improvement upon the italicised part. If none of the three alternatives (a, b, c) improves the sentence, your answer is (d).

118. He doesn't hesitate to do whatever his brother does.

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