

PART - I : GENERAL INTELLIGENCE AND REASONING

Directions (1-11) : Find the missing letters/numbers/words from the given responses.

1. Thread : Cloth :: Wire : ?

- (a) Power (b) Mesh
(c) Telegraph (d) Filter

2. Scissors : Cloth :: ?

- (a) Stone : Grinder
(b) Axe : Wood
(c) Knief : Stone
(d) Pistol : Target

3. LJH : KKI :: CIA : ?

- (a) BJB (b) BBC
(c) DBB (d) CBZ

4. EGIK : FILO :: FHJL : ?

- (a) JGMP (b) JGPM
(c) GJPM (d) GJMP

5. DRIVE : EIDRV :: BEGUM : ?

- (a) EUBGM (b) MGBEU
(c) BGMEU (d) UEBGM

6. 49 : 81 :: 64 : ?

- (a) 36 (b) 100 (c) 121 (d) 144

7. 371 : 150 :: 468 : ?

- (a) 247 (b) 357 (c) 246 (d) 345

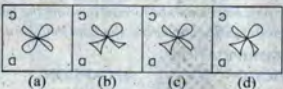
8. 42 : 31 :: ?

- (a) 97 : 86 (b) 53 : 46
(c) 79 : 86 (d) 64 : 79

9. Question Figures :



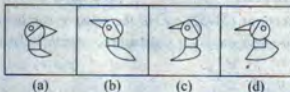
Answer Figures :



10. Question Figures :



Answer Figures :



11. ADHM : ZWSN :: CFJO : ?

- (a) YVRM (b) XUQL
(c) XWTP (d) ZXVT

Directions (12-17) : Select the odd number/letters/words/figures from the given responses.

12. (a) Pond-Lake

(b) Qunital-Ton

(c) Car-Bus

(d) Church-Monument

13. (a) Hardworking

(b) Glorious

(c) Disagree

(d) Dedicated

14. (a) ADGJ

(b) NQTV

(c) PSVX

(d) CFIK

15. (a) 64

(b) 900

(c) 343

(d) 1000

16. (a) 81-45

(b) 72-91

(c) 117-99

(d) 135-126

17.



(a)



(b)



(c)



(d)

18. A statement has been given, which is followed by four inferences marked (a), (b), (c) and (d). Find out the inference that definitely follows the given statement
Most dresses in that shop are expensive.
(a) Some dresses in that shop are expensive
(b) There are cheap dresses also in that shop
(c) Handloom dresses in that shop are cheap
(d) There are no cheap dresses available in that shop

19. Find out the set of numbers amongst the four sets of number given in the alternatives which is most like the set given in the question :

- (17, 13, 20)
(a) (8, 12, 19) (b) (11, 9, 30)
(c) (8, 19, 11) (d) (5, 13, 11)

20. Your age is 10 years less than half your mother's age who is 5 years younger than your father. If your father is 45 years old. What is your age ?

- (a) 20 years (b) 15 years
(c) 10 years (d) 5 years

Directions (21-27) : Find the missing number/letter/figure from the given responses to complete the series.

21. $\frac{D}{5} \cdot \frac{G}{9} \cdot \frac{J}{14} \cdot \frac{M}{20} \cdot ?$

- (a) $\frac{Q}{26}$ (b) $\frac{O}{26}$
(c) $\frac{Q}{27}$ (d) $\frac{P}{27}$

22. DWEV, FUGT, HSIR, ?

- (a) JKQP (b) JPKQ
(c) JQKP (d) JPKQ

23. 2, 15, 4, 47, 7, 118, 11, ?, ?

- (a) 260, 15 (b) 252, 16
(c) 250, 17 (d) 254, 16

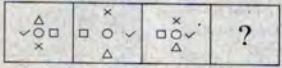
24. 313, 623, 933, 1243, ?

- (a) 1863 (b) 2173
(c) 1553 (d) 2483

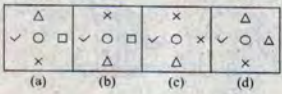
25. B2D, E3H, 14M, ?

- (a) N5R (b) N5T
(c) N5S (d) N5Q

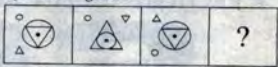
26. Question Figures :



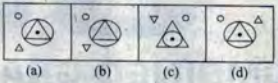
Answer Figures :



27. Question Figures :



Answer Figures :



28. Which one set of letters when sequentially placed at the gaps in the given letters series shall complete it ?

a c b _ c e _ f _

- (a) dde (b) cde
(c) dee (d) ddg

Directions (29-30) : Which one of the given responses would be a meaningful order of the following words ?

29. 1. Heel 2. Shoulder 3. Skull 4. Neck
5. Knee 6. Chest 7. Thigh 8. Stomach
9. Face 10. Hand

- (a) 3, 4, 7, 9, 2, 5, 8, 10, 6, 1
(b) 3, 9, 4, 2, 10, 6, 8, 7, 5, 1
(c) 2, 4, 7, 10, 1, 5, 8, 9, 6, 3
(d) 4, 7, 10, 1, 9, 6, 3, 2, 5, 8

30. 1. Study 2. Job 3. Examination
4. Earn 5. Appointment

- (a) 1, 3, 5, 2, 4 (b) 1, 2, 3, 4, 5
(c) 1, 3, 2, 5, 4 (d) 1, 3, 5, 4, 2

31. C is the wife of B, E is the son of C, A is the brother of B and father of D. What is the relationship of E to D ?

- (a) Mother (b) Sister
(c) Brother (d) Cousin

32. A was born 5 years before B, B is 4 years older than C and 3 years younger to D. If A is now 17 years old, how old is D ?

- (a) 19 years (b) 15 years
(c) 12 years (d) 8 years

33. Six girls are standing in a circle facing to the centre. Bindu is to the left of Viji. Rekha is in between Bindu and Mumtaz. Jessa is in between Viji and Nirmala. Who is to the left of Mumtaz ?

- (a) Rekha (b) Nirmala
(c) Viji (d) Bindu

Directions (34-35) : A word/set of letters given in capital letters is followed by four answer words. Out of these only one cannot be formed by using the letters of the given word/set of letters. Find out that word.

34. PERSONIFICATION

- (a) FICTION (b) CAPTION
(c) NOTION (d) FASHION

35. CONCENTRATION

- (a) CONCERN (b) NATION
(c) TRAIN (d) CENTRE

36. Heavier coins are costlier. Ram's coin is heavier than Mohan's and costlier than Ramesh's. Naresh's coin is costlier than Ram's but lighter than Yogesh's. Ramesh's coin is costlier than Mohan's. So who is the owner of the costliest coin?

- (a) Ram (b) Ramesh
(c) Yogesh (d) Naresh

37. If DELHI is coded as 73541 and CALCUTTA as 82589662, then how can CALICUT be coded?

- (a) 5279431 (b) 5978013
(c) 8251896 (d) 8543691

38. Find the missing number from the given responses.

4	9	17	6
20	25	8	19
7	5	2	9
?	20	26	35

- (a) 7 (b) 9
(c) 8 (d) 6

39. Somu travelled from a point A straight to B, a distance of 12 km. He turned right and travelled 8 km and reached point C. From that point took right turn and travelled 6 km, and reached point D. How far is he away from the starting point?

- (a) 10 km (b) 12 km
(c) 13 km (d) 14 km

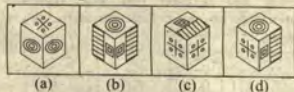
40. A and B start from a point simultaneously. A moves to his East and travels 2 km, and B moves to his South and travels 2 km. A takes right turn 90° clockwise and travels 2 km. B takes left turn 90° anticlockwise and travels 2 km. Where would they be found from the starting point?

- (a) Both in South-East region
(b) Both in East region
(c) In East and in North region
(d) In South and in North region

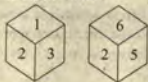
41. Choose from the four answer figures, the figure that will be formed when question figure is folded into a box.



Answer Figures :



42. Where is the invisible number in the two positions of the same cube?



- (a) opposite of 2
(b) opposite of 3
(c) opposite of 5
(d) opposite of 6

43. A statement is given followed by two conclusions, I and II. You have to consider the statement to be true, even if it seems to be at variance from commonly known facts. You are to decide which of the given conclusions can definitely be drawn from the given statement. Indicate your answer.

Statement : Child rearing is an art; young parents need training in child-rearing practices.

Conclusions : I. Now-a-days young parents know nothing about child rearing.

II. Training will enable the young couples to become better parents.

- (a) Only I follows
(b) Only II follows
(c) Neither I nor II follows
(d) Both I and II follow

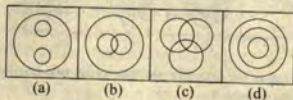
44. A statement is given followed by four assumptions, (a), (b), (c) and (d). You have to consider the statement to be true, even if it seems to be at variance from commonly known facts. You are to decide which of the given assumptions can definitely be drawn from the given statement. Indicate your answer.

Statement : Television has a strong influence in the young children's development.

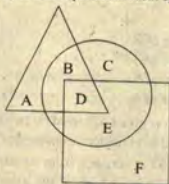
Assumptions :

- (a) Children watching TV should be controlled by the parents.
(b) Young children should not be allowed to watch TV programmes.
(c) Television affects the academic progress of the young children.
(d) While developing TV programmes, educational, developmental and moral aspects of children should be taken care of.

45. Identify the diagram that best represents the relationship among college students, singers and dancers.



46. In the given figure, the circle represents boys, the triangle represents players and the square represents rural. What portion represents rural sports boys?

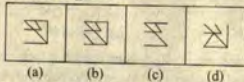


- (a) E
(b) F
(c) D
(d) B
47. Which answer figure will complete the question figure?



51. Vintage cars are those cars which were built between :
- (a) 1945 and 1960
(b) 1939 and 1945
(c) 1930 and 1939
(d) 1918 and 1930
52. Which country of the following has the largest Muslim population?
- (a) India
(b) Pakistan
(c) Indonesia
(d) Saudi Arabia
53. Why excessive heating and repeated use of cooking oil are most undesirable?
- (a) The oil vapor can cause indoor pollution.
(b) Carcinogenic substances like benzopyrene are produced.
(c) Nutrient value of food is lost.
(d) Loss and wastage of oil.
54. From which of the following Upanishads the words 'Satyameva Jayate' inscribed in Devanagari Script below the abacus of the State Emblem are?
- (a) Prashna
(b) Mundaka
(c) Mandukya
(d) Ishavasya

Answer Figures :

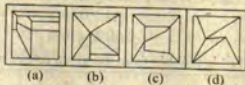


48. From the given answer figures, select the one in which the question figure is hidden/embedded.

Question Figure :



Answer Figures :



49. From among the given alternatives select the one in which the set of numbers is most like the set of numbers given in the question.

Given : (10.5, 15.0, 21.5)

- (a) (32.5, 37.0, 43.5)
(b) (54.4, 58.0, 62.4)
(c) (62.2, 66.8, 73.3)
(d) (81.3, 85.8, 92.0)
50. Karan facing towards south moved straight 2 km and from there turned to his right 90° and travelled 2 km. Then he took a 45° turn to his left and travelled 1 km. Where would he be now with respect to the starting point?
- (a) South region
(b) South-east region
(c) North-west region
(d) South-west region

PART - II : GENERAL AWARENESS

55. Helgoland is an island of which of the following countries?
- (a) Britain
(b) Germany
(c) USA
(d) Indonesia
56. A storage area used to store data to compensate for the difference in speed at which the different units can handle data is :
- (a) Memory
(b) Buffer
(c) Accumulator
(d) Address
57. In which of the following countries does 'Three Gorges Dam' called world's largest concrete structure lie?
- (a) China
(b) Taiwan
(c) Malaysia
(d) Thailand
58. The name of the first cloned sheep was :
- (a) Molly
(b) Dolly
(c) Jolly
(d) Roly
59. Who was the First Test Centurion in Indian cricket?
- (a) Vinu Mankad
(b) C K Naidu
(c) Lala Amarnath
(d) Mansur Ali Pataudi

60. Who invented optical fibre ?
 (a) Samuel Cohen
 (b) Narinder Kapany
 (c) Percy L. Spencer
 (d) T.H. Maimah
61. Who of the following is known as Lokahitavadi ?
 (a) G.H. Deshmukh
 (b) G.K. Gokhale
 (c) J.G. Phule
 (d) M.G. Ranade
62. With reference to Indian freedom struggle which one among the following events occurred earliest ?
 (a) Gandhi-Irwin Pact
 (b) Lucknow Pact
 (c) Cripps Mission Proposals
 (d) August Offer
63. During India's Freedom Struggle, which one of the following led to the first 'All India Hartal' ?
 (a) Protest against Rowlatt Act
 (b) Protest against Jalianwalla Bagh massacre
 (c) Trial of Mahatma Gandhi
 (d) Arrival of Simon Commission
64. The Non-Cooperation movement was called off as a result of agitation at which one of the following places ?
 (a) Calcutta
 (b) Champaran
 (c) Chauri Chaura
 (d) Meerut
65. Consider the following pairs :
 1. Ilbert Bill — Lord Hastings
 2. August Offer — Lord Ripon
 Which of the above pairs is/are correctly matched ?
 (a) Only 1
 (b) Only 2
 (c) Both 1 and 2
 (d) Neither 1 nor 2
66. Who of the following founded the 'East India Association' ?
 (a) C.R. Das
 (b) Dadabhai Naoroji
 (c) Devendra Nath Tagore
 (d) V.D. Savarkar
67. Who of the following started the newspaper 'Bande Mataram' ?
 (a) Barindra Kumar Ghose
 (b) Bipin Chandra Pal
 (c) Devendra Nath Tagore
 (d) Surendra Nath Banerjee
68. Consider the following famous historical persons :
 1. Ashvaghosha 2. Bhavabhuti
 3. Nagarjuna 4. Nagasena
 Which of the above are Buddhist scholars ?
 (a) 1 and 3 (b) 2, 3 and 4
 (c) 1, 3 and 4 (d) 1, 2 and 4
69. Simon Commission was appointed to look into the working of the :
 (a) Indian Councils Act, 1892
 (b) Government of India Act, 1909
 (c) Government of India Act, 1919
 (d) Government of India Act, 1935
70. Who of the following is associated with Tashkent Agreement ?
 (a) Pandit Jawaharlal Nehru
 (b) Lal Bahadur Shastri
 (c) Indira Gandhi
 (d) Morarji Desai
71. Who of the following was recently appointed the Chief Justice of Madhya Pradesh High Court ?
 (a) Justice Ajay Manikrao Khanwilkar
 (b) Justice Sharad Arvind Bobde
 (c) Justice D.K. Jain
 (d) Justice Anand Prakash Shah
72. With reference to Indian Freedom Struggle, consider the following statements :
 1. P.C. Ray founded the Bengal Chemical Works.
 2. V.O. Chidambaram Pillai set up the Steam Navigation Company.
 Which of the statements given above is/are correct ?
 (a) Only 1
 (b) Only 2
 (c) Both 1 and 2
 (d) Neither 1 nor 2
73. India and which of the following countries recently decided to hold a Joint Air Force Exercise for the first time in 2014 ?
 (a) Japan (b) USA
 (c) Russia (d) China
74. With reference to Union Government, which one of the following does undertake the country-wide Economic Census ?
 (a) Department of Expenditure
 (b) The National Sample Survey Organization
 (c) Planning Commission
 (d) The Central Statistical Organization
75. The 'Uruguay Round' negotiations resulted in the establishment of :
 (a) NATO (b) OECD
 (c) WHO (d) WTO
76. In which year was 'Rajiv Gandhi Grameen Vidyutikaran Yojana' launched ?
 (a) 2004 (b) 2005
 (c) 2006 (d) 2007
77. Who is empowered by the Constitution of India to dissolve the Lok Sabha before expiry of its term ?
 (a) The Prime Minister of India on the advice of the Speaker of the Lok Sabha
 (b) The President of India
 (c) The President of India on the advice of the Prime Minister of India
 (d) The Speaker of the Lok Sabha
78. Bank rate is the rate at which the Reserve Bank of India provides loans to :
 (a) Public Sector Undertakings
 (b) Scheduled Commercial Banks
 (c) Private Corporate Sector
 (d) Non-Banking Financial Institutions
79. The maximum number of members that the Legislative Assembly of a State in India can have is :
 (a) 400 (b) 450
 (c) 500 (d) 550
80. 1. When Vice-President acts as President of India, he ceases to perform the function of the Chairman of Rajya Sabha.

2. The President of India can promulgate Ordinances at any time except when both Houses of Parliament are in session. Which of the statements given above is/are correct ?

- (a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

81. What is the correct order of occurrence of the following places as one moves from east to west ?

- (1) Murshidabad
(2) Gorakhpur
(3) Bhopal
(4) Bhavnagar
(a) 2-4-3-1 (b) 1-3-4-2
(c) 1-2-3-4 (d) 4-3-2-1

82. Which one of the following states has the largest forest area to its total land area ?

- (a) Mizoram
(b) Arunachal Pradesh
(c) Sikkim
(d) Jammu and Kashmir

83. Rihand Valley Project is located in which one of the following states ?

- (a) Orissa
(b) Gujarat
(c) Himachal Pradesh
(d) Uttar Pradesh

84. The city of Nasik is situated on the bank of which one of the following rivers ?

- (a) Krishna (b) Mandovi
(c) Godavari (d) Tapi

85. For which one of the following is Planimeter used ?

- (a) To know the surface area on a map
(b) To know the distance on a map
(c) To know the direction on a map
(d) To know the height of places on a map

86. Which of the following tributaries of the Ganga System flows northwards ?

- (a) Kosi (b) Ghaghara
(c) Gandak (d) Son

87. Which of the following option in File pull down menu is used to close a MS Word document ?

- (a) Quit (b) Close
(c) Exit (d) New

88. Match the following :

(Palace) (Industry)

- | | |
|------------------|----------------------|
| A. Muzaffarnagar | 1. Cotton textiles |
| B. Adoni | 2. Sugar |
| C. Ranchi | 3. Sports goods |
| D. Jalandhar | 4. Engineering goods |

A B C D A B C D

- (a) 2 1 4 3 (b) 1 3 4 2
(c) 2 3 4 1 (d) 1 4 3 2

89. Match the following :

(Person) (Organisation)

- | | |
|----------------------|---------|
| A. Juan Somavia | 1. IAEA |
| B. Margaret Chan | 2. ILO |
| C. Kemal Dervis | 3. WHO |
| D. Mohamed ElBaradei | 4. UNDP |

A B C D A B C D

- (a) 1 2 3 4 (b) 2 3 4 1
(c) 2 4 3 1 (d) 1 3 2 4

90. The boundary between North and South Korea is marked by which one of the following ?

- (a) 16th Parallel
(b) 29th Parallel
(c) 38th Parallel
(d) 49th Parallel

91. For which one of the following is the density maximum ?

- (a) Chloroform
(b) Water
(c) Benzene
(d) Ice

92. Sarkaria Commission was established to study :

- (a) President and Governors' relations
(b) Centre - State relations
(c) State and Panchayat body relations
(d) President and Prime Minister's relations

93. Which one of the following properties changes with valency ?

- (a) Atomic weight
(b) Equivalent weight
(c) Molecular weight
(d) Density

94. Which one of the following is the softest ?

- (a) Sodium
(b) Aluminium
(c) Iron
(d) Lithium

95. Which one of the following is correct ? Butter is :

- (a) a super cooled oil.
(b) an emulsion.
(c) a molecular solid.
(d) None of the above

96. Which one of the following substances is used in the manufacture of safety matches ?

- (a) Red phosphorus
(b) White phosphorus
(c) Phosphorus trioxide (P_2O_3)
(d) Black phosphorus

97. Which one of the following is an element ?

- (a) Topaz
(b) Diamond
(c) Ruby
(d) Sapphire

98. Which one of the following is correct ?

The mean distance from the Sun to the Earth is called a/an :

- (a) Light Year
(b) Parallax Second
(c) Astronomical Unit
(d) Angstrom

99. On which one of the following conservation laws, does a rocket work ?

- (a) Mass
(b) Energy
(c) Linear momentum
(d) Angular momentum

100. By using which one of the following techniques, is DNA fingerprint done ?

- (a) ELISA
(b) RIA
(c) Northern Blotting
(d) Southern Blotting

PART - III ; QUANTITATIVE APTITUDE

101. If $\sin \theta = \frac{2}{9}$, then $\frac{\operatorname{cosec} \theta}{\cot \theta - \cos \theta}$ will be equal to :
- (a) $\frac{81}{7\sqrt{77}}$ (b) $\frac{71}{8\sqrt{88}}$
 (c) $\frac{4}{7\sqrt{77}}$ (d) $\frac{9}{8\sqrt{88}}$

102. ABC is a triangle and O is the centre of its circumcircle and $\angle OBC = 22^\circ$, then $\angle BAC$ will be :



- (a) 22° (b) 44°
 (c) 68° (d) 46°
103. If $a^4 + b^4 = a^2 b^2$, then $(a^6 + b^6)$ equals :

- (a) 0 (b) 1
 (c) $a^2 + b^2$ (d) $a^2 b^4 + a^4 b^2$

104. $(0.\overline{11} + 0.\overline{22}) \times 3$ is equal to :

- (a) .3 (b) 1.9
 (c) 1 (d) $0.\overline{3}$

105. If $4^x + 4 = 10.2^{x-1}$, then what will be the possible value of x from the following ?

- (a) 0 (b) 1
 (c) 2 (d) None of these

106. The LCM of two numbers is 44 times of their HCF. The sum of the LCM and HCF is 1125. If one number is 25, then the other number is :

- (a) 1100 (b) 975
 (c) 900 (d) 800

107. If $\alpha + \beta = \frac{\pi}{2}$ and $\sin \alpha = \frac{1}{x}$, then the value of $\cos 2\beta$ will be :

- (a) $\sqrt{\frac{2-x^2}{x^2}}$ (b) $\frac{x^2}{2-x^2}$
 (c) $\frac{2}{2-x^2}$ (d) $\frac{2-x^4}{x^2}$

108. The area of two similar triangle ABC and PQR are 1350 sq. cm and 216 sq. cm respectively, then what will be the ratio of corresponding sides AB and PQ ?

- (a) 5 : 4
 (b) 5 : 2
 (c) cannot be decided
 (d) None of the above

109. If selling price of an article is reduced by 60%, then there is a loss of 10% on cost price. The initial profit percent was :

- (a) 70 (b) 80
 (c) 100 (d) 125

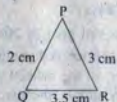
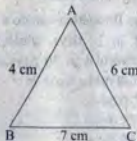
110. If $x^2 + \frac{1}{x^2} - 47 = 0$, then $x^3 + \frac{1}{x^3}$ will be equal to :

- (a) 272 (b) 301
 (c) 322 (d) 364

111. If $8 \sin A = 4 + \cos A$, then the value of $\sin A$ will be :

- (a) $\frac{5}{13}$ (b) $\frac{12}{13}$
 (c) $\frac{8}{13}$ (d) $\frac{1}{13}$

112. The given two triangle ΔABC and ΔPQR will be :



- (a) Equilateral
 (b) Similar
 (c) Rightangled
 (d) Congruent

113. Evaluate

$$\frac{(a^2 - b^2)^3 + (b^2 - c^2)^3 + (c^2 - a^2)^3}{(a-b)^3 + (b-c)^3 + (c-a)^3}$$

- (a) 1 (b) 0
 (c) -1 (d) $(a+b+c)$

114. If $\cos \theta + \operatorname{cosec} \theta = 2$, then $\sin^3 \theta + \operatorname{cosec}^3 \theta$ will be equal to :

- (a) 1 (b) 2
 (c) 3 (d) 4

115. What will be the the value of

$$\sqrt{x+y+z} + 2\sqrt{xy+yz}$$

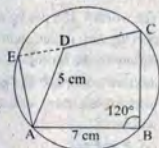
- (a) $\sqrt{x+y+z}$
 (b) $\sqrt{x+y+zx}$
 (c) $\sqrt{x+y+\sqrt{z}}$
 (d) $\sqrt{x+y+z}$

116. If $\sec \frac{5\theta}{2} - \frac{1}{\sin \frac{7\theta}{2}} = 0$ and

$0^\circ < \theta < 90^\circ$, then value of θ will be :

- (a) 0 (b) 15°
 (c) 30° (d) 45°

117. $ABCD$ is a parallelogram and the circle passing through A, B and C intersect CD (produced) at point E . Given that $AB = 7$ cm, $AD = 5$ cm, and $\angle ABC = 120^\circ$ then AE will be :



- (a) 7 cm (b) 5 cm
 (c) $7\sqrt{3}$ cm (d) $5\sqrt{3}$ cm

118. The sides AB and AC of ΔABC are produced to P and Q respectively. If the bisectors of $\angle PBC$ and $\angle QCB$ intersect at O , and $\angle A = 110^\circ$, then $\angle BOC$ will be equal to :

- (a) 55° (b) 45°
 (c) 35° (d) 25°

119. If $x = 1 - y$ and $x^2 = 2 - y^2$, then $x^4 + y^4$ will be equal to :

- (a) $\frac{1}{2}$ (b) $\frac{3}{2}$
(c) $\frac{5}{2}$ (d) $\frac{7}{2}$

120. At some rate of simple interest, A lent ₹ 6,000/- to B for 2 years and ₹ 1,500/- to C for 4 years and received ₹ 900/- as interest from both of them together. The rate of interest per annum was :

- (a) 5% (b) 6%
(c) 8% (d) 10%

121. In two types of stainless steel, the ratio of chromium and steel are 2 : 11 and 5 : 21 respectively. In what proportion should the two types be mixed so that the ratio of chromium to steel in the mixed type becomes 7 : 32 ?

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

122. A sum of ₹ 7,000/- is divided among A, B, C in such a way that the shares of A and B are in the ratio 2 : 3 and those of B and C are in the ratio 4 : 5. The share of B is :

- (a) ₹ 2,400/- (b) ₹ 3,000/-
(c) ₹ 1,600/- (d) ₹ 2,000/-

123. Tea worth ₹ 126 per kg and ₹ 135 per kg are mixed with a third variety in the ratio 1 : 1 : 2. If the mixture is worth ₹ 153 per kg, the price of the third variety per kg will be :

- (a) ₹ 175.50/-
(b) ₹ 180.00/-
(c) ₹ 169.50/-
(d) ₹ 170.00/-

124. In the afternoon, a student read 100 pages at the rate of 60 pages per hour. In the evening, when she was tired, she read 100 more pages at the rate of 40 pages per

hour. What was her average rate of reading in pages per hour ?

- (a) 60 (b) 70
(c) 48 (d) 50

125. A trader purchases a watch and a wall clock for ₹ 390/-. He sells them making a profit of 10% on the watch and 15% on the wall clock. He earns a profit of ₹ 51.50/-. The difference between the original prices of the wall clock and the watch is equal to :

- (a) ₹ 80/- (b) ₹ 120/-
(c) ₹ 110/- (d) ₹ 100/-

126. The wrong number in the series 2, 9, 28, 65, 126, 216, 344 is :

- (a) 65
(b) 216
(c) 9
(d) None of these

127. Eight consecutive numbers are given. If the average of the two numbers that appear in the middle is 6, then the sum of the eight given numbers is :

- (a) 54 (b) 64
(c) 36 (d) 48

128. If $(1 \times 2 \times 3 \times 4 \times \dots \times n) = n!$, then $(14! - 13! - 12!)$ is equal to :

- (a) $14 \times 13 \times (13!)$
(b) $13 \times 12 \times (12!)$
(c) $14 \times 12 \times (12!)$
(d) $14 \times 12 \times (13!)$

129. A and B together can do a piece of work in 12 days, while B alone can finish it in 30 days. A alone can finish the work in :

- (a) 20 days
(b) 25 days
(c) 15 days
(d) 18 days

130. The marked price is 20% higher than cost price. A discount of 20% is given on the marked price. By this type of sale, there is :

- (a) 4% loss
(b) 2% loss
(c) no loss no gain
(d) 4% gain

131. A prism has as the base a right-angled triangle whose sides adjacent to the right angles are 10 cm and 12 cm long. The height of the prism is 20 cm. The density of the material of the prism is 6 gm/cubic cm. The weight of the prism is :

- (a) 6.4 kg
(b) 7.2 kg
(c) 3.4 kg
(d) 4.8 kg

132. In a circle of radius 21 cm, an arc subtends an angle of 72° at the centre. The length of the arc is :

- (a) 21.6 cm
(b) 26.4 cm
(c) 13.2 cm
(d) 19.8 cm

133. The x-intercept of the graph of

$$7x - 3y = 2 \text{ is :}$$

- (a) $\frac{3}{4}$ (b) $\frac{3}{7}$
(c) $\frac{2}{5}$ (d) $\frac{2}{7}$

134. The speed of a bus is 72 km/hr.

The distance covered by the bus in 5 seconds is :

- (a) 100 m (b) 60 m
(c) 50 m (d) 74.5 m

135. A man standing at a point P is watching the top of a tower, which makes an angle of elevation of 30° . The man walks some distance towards the tower and then his angle of elevation of the top of the tower is 60° . If the height of the tower is 30 m, then the distance he moves is :

- (a) 22 m (b) $22\sqrt{3}$ m
(c) 20 cm (d) $20\sqrt{3}$ m

136. If $p + q = 10$ and $pq = 5$, then the numerical value of $\frac{p}{q} + \frac{q}{p}$ will be :

- (a) 16 (b) 20
(c) 22 (d) 18

137. If $a + \frac{1}{a} = \sqrt{3}$, then the value of $a^6 - \frac{1}{a^6} + 2$ will be :

- (a) 1 (b) 2
(c) $3\sqrt{3}$ (d) 5

138. An equilateral triangle TQR is drawn inside a square $PQRS$. The value of the angle PTS , in degrees, is :

- (a) 120 (b) 150
(c) 75 (d) 90

139. If a, b and c are the sides of a triangle and

$$a^2 + b^2 + c^2 = ab + bc + ca, \text{ then the triangle is :}$$

- (a) right-angled
(b) obtuse-angled
(c) equilateral
(d) isosceles

140. The distance between the centres of two equal circles, each of radius 3 cm, is 10 cm. The length of a transverse common tangent is :

- (a) 8 cm (b) 10 cm
(c) 4 cm (d) 6 cm

141. If the perimeter of a right-angled triangle is 56 cm and area of the triangle is 84 sq cm, then the length of the hypotenuse is (in cm) :

- (a) 25 (b) 50
(c) 7 (d) 24

142. In ΔABC , $\angle A = 30^\circ$, $\angle B = 60^\circ$. Find $\angle C$ in circular measure.

- (a) $\frac{2\pi}{3}$ (b) $\frac{3\pi}{4}$
(c) $\frac{\pi}{6}$ (d) $\frac{\pi}{2}$

143. If $\cos \theta + \sec \theta = 2$, the value of $\cos^6 \theta + \sec^6 \theta$ is :

- (a) 4 (b) 8
(c) 1 (d) 2

144. Kamal can do a work in 15 days. Bimal is 50% more efficient than Kamal. The number of days, Bimal will take to do the same piece of work, is :

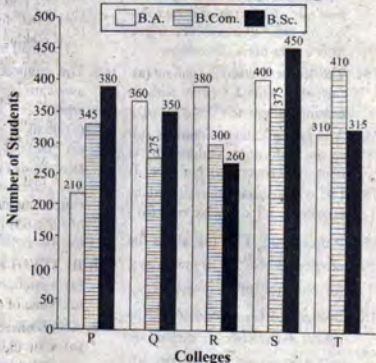
- (a) 14 (b) 12
(c) 10 (d) $10\frac{1}{2}$

145. 3 men or 5 women can do a work in 12 days. How long will 6 men and 5 women take to finish the work ?

- (a) 20 (b) 10
(c) 4 (d) 15

Directions (146-150) : Study the following graph carefully to answer these questions.

Number of Students Enrolled in Three different disciplines in Five Different Colleges



146. Number of student studying B.A. college S forms what percent of total number of students studying all the disciplines together in that college ? (rounded off to two digits after decimal)

- (a) 38.64 (b) 42.55
(c) 40.42 (d) 32.65

147. Number of students studying B.A. in college T forms approximately what percent of the total number of students studying B.A. in all the colleges together ?

- (a) 19 (b) 28
(c) 67 (d) 77

148. What is the respective ratio of total number of students studying B.Sc. in colleges S and T together to those studying B.Com in the colleges P and Q together ?

- (a) 4 : 5 (b) 14 : 13
(c) 41 : 51 (d) 153 : 124

149. What is the respective ratio of total number of students studying B. A., B. Com. and B.Sc. in college S ?

- (a) 19 : 18 : 16 (b) 16 : 15 : 18
(c) 16 : 15 : 13 (d) 19 : 16 : 13

150. What is the total number of students studying B.Sc. in colleges P, R and T together ?

- (a) 1755 (b) 1155
(c) 955 (d) 1555

PART - IV : ENGLISH LANGUAGE AND COMPREHENSION

Directions (151-155) : In these questions, some of the sentences have errors and some are correct. Find out which part of a sentence has an error. If a sentence is free from errors (d) is the answer.

151. The doctor referred the patient (a)/ for the O.P.D. (b)/ without examining him. (c)/ No error (d)
152. A man who always connives (a)/ on the faults of his children (b)/ is their worst enemy. (c)/ No error (d)
153. I do not understand (a)/ why (b)/ he is so angry at me. (c)/ No error (d)
154. I am hearing a lot (a)/ about the problem (b)/ of AIDS these days. (c)/ No error (d)
155. Because of his innocence (a)/ he cannot distinguish (b)/ a cheat for an honest person. (c)/ No error (d)

Directions (156-160) : In these questions, sentences are given with blanks to be filled in with an appropriate word(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four and indicate it in the Answer Sheet.

156. I with him about his rudeness.
(a) remonstrated
(b) demonstrated
(c) shouted
(d) reiterated
157. To the dismay of all the students, the class monitor was berated by the Principal at a school assembly.
(a) critically
(b) ignominiously
(c) prudently
(d) fortuitously
158. All attempts to revive the fishing industry were failure.
(a) foredoomed to
(b) heading at
(c) predicated for
(d) estimated to

159. There are parked outside than yesterday.
(a) fewer cars
(b) few cars
(c) less cars
(d) a small number of cars

160. The minister had to some awkward questions from reporters.
(a) fend
(b) fend at
(c) fend out
(d) fend off

Directions (161-165) : Out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the Answer Sheet.

161. BENEVOLENT
(a) Beneficial (b) Kind
(c) Helpful (d) Supportive
162. ANCESTORS
(a) Extinct tribes
(b) Relatives
(c) Forefathers
(d) Old people

163. EMBRACE
(a) Impress (b) Except
(c) Embarrass (d) Accept

164. MEEK
(a) Light-hearted
(b) Serious
(c) Submissive
(d) Benign

165. SUFFICIENT
(a) Full (b) Complete
(c) Enough (d) Less

Directions (166-170) : In these questions, choose the word that is opposite in meaning to the given word and mark it in the Answer Sheet.

166. UNANIMOUS
(a) Uncertain (b) Partial
(c) Discordant (d) Divergent
167. SURRENDER
(a) Release (b) Claim
(c) Plunder (d) Attack
168. ASSEMBLED
(a) Removed (b) Diffused
(c) Dispersed (d) Eliminated

169. BOORISH
(a) Refined (b) Funny
(c) Eccentric (d) Friendly

170. BLUNT
(a) Pointed (b) Sharpened
(c) Polished (d) Filed

Directions (171-175) : In these questions, four alternatives are given for the Idiom/Phrase printed in bold in the sentence. Choose the alternative which best expresses the meaning of the given Idiom/Phrase and mark it in the Answer Sheet.

171. The popularity of the yesterday's superstar is **is on the wane**.
(a) at its peak
(b) at rock bottom
(c) growing more
(d) growing less
172. He is leaving the country for a **good**.
(a) for better prospects
(b) for a good cause
(c) for ever
(d) for others good
173. He is an interesting speaker but tends to **go off at a tangent**.
(a) change the subject immediately
(b) forget things in between
(c) go on at great length
(d) become boisterous
174. He sold his house for a **song**.
(a) at a reasonable price
(b) at a discount
(c) very cheaply
(d) at a premium
175. Despite the trust bestowed on the minister he turned out to be a **snake in the grass** during the revolution.
(a) a secret enemy
(b) a treacherous person
(c) an unforeseen danger
(d) an unexpected misfortune

Directions (176-180) : In these questions, A part of the sentence is **bold** part of which may need improvement. Alternatives are given at (a), (b) and (c) below which may be a better option. In case no improvement is needed, your answer is (d).

176. Miss Pillai teaches very well, **isn't it** ?
(a) didn't she ?
(b) doesn't she ?
(c) wasn't it ?
(d) No improvement
177. He has **fallen out** with the girl he wanted to marry.
(a) fallen off
(b) fallen in love
(c) fallen for
(d) No improvement
178. He does not smoke, **nor he drinks**.
(a) nor he does drink
(b) neither he does drink
(c) nor does he drink
(d) No improvement
179. The patient **could have been saved** if he had been taken to the hospital in time.
(a) could be saved
(b) could save
(c) had been saved
(d) No improvement
180. I must speak to the landlord about the people above. They make **much noise**.
(a) much of noise
(b) very much noise
(c) too much noise
(d) No improvement

Directions (181-185) : In question, out of the four alternatives, choose the one which can be substituted for the given

words/sentence and indicate it in the Answer Sheet.

181. Scale used for measuring the strength of an earthquake
(a) Celsius (b) Newton
(c) Richter (d) Linear
182. Something kept as a reminder of an event
(a) Trophy (b) Souvenir
(c) Prize (d) Antique
183. One who practices one of the arts
(a) Painter (b) Artist
(c) Designer (d) Architect
184. Found all over the world
(a) International
(b) Universal
(c) Regional
(d) Provincial
185. A general pardon of offenders
(a) Parley
(b) Amnesty
(c) Parole
(d) Acquittal

Directions (186-190) : In these questions, groups of four words are given. In each group, one word is correctly spelt. Find the correctly spelt word.

186. (a) Dammage (b) Damaige
(c) Dammege (d) Damage
187. (a) Accomplish (b) Acomplush
(c) Ackmplesh (d) Accomplish
188. (a) Puerrile (b) Puerrille
(c) Purrile (d) Puerile
189. (a) Satelite (b) Sattelite
(c) Satellite (d) Sattellite
190. (a) Velnerable (b) Vulnarable
(c) Vulnerable (d) Valnerable

Directions (191-200) : In the following passage, some of the words have been left out. First read the passage over and try to understand what it is about. Then

fill in the blanks with the help of the alternatives given. Mark your answer in the Answer Sheet.

PASSAGE

Someone ... (191)... at the door. A lady opened it. A stranger was standing at the ... (192)... He said, "Madam, please excuse me for ... (193)... you. May I ask you something? I ... (194)... by your house everyday on my ... (195)... to work, I have ... (196)... that every day you hit your son on ... (197)... head with a loaf of bread." The lady replied, "Yes, that's ... (198)...". The stranger asked, "This morning, I saw you ... (199)... him with a chocolate. Why ... (200)... ? The lady replied, "Today is his birthday. Therefore I hit him with a sweet thing."

191. (a) pointed (b) knocked
(c) looked (d) moved
192. (a) fence (b) gate
(c) compound (d) door
193. (a) disturbing (b) harassing
(c) asking (d) enquiring
194. (a) wait (b) watch
(c) stand (d) pass
195. (a) office (b) steps
(c) legs (d) way
196. (a) decided (b) felt
(c) noticed (d) remembered
197. (a) your (b) his
(c) my (d) our
198. (a) right (b) obvious
(c) surprising (d) clear
199. (a) feeding (b) bestowing
(c) giving (d) hitting
200. (a) bread (b) then
(c) so (d) change