

## Part A Reasoning

**Directions** (Q.Nos. 1-9) *Select the related words/letters/numbers from the given alternatives.*

1. Acting : Theatre :: Gambling : ?

- (a) Casino (b) Club (c) Bar (d) Gym

2. Knife : Cut :: Axe : ?

- (a) Lacerate (b) Chop  
(c) Slice (d) Sever

3. Hope : Aspire :: ?

- (a) Fake : Ordinary  
(b) Fib : Lie  
(c) Film : Flam  
(d) Love : Elevate

4. AZBY : CXDW :: HSIR : ?  
 (a) JQKP (b) KPLO  
 (c) YBXC (d) TGSB
5. DMVE : ? :: HQZI : JSBK  
 (a) GOXF (b) FOXG  
 (c) GOXG (d) FNWG
6. 17 : 7 :: 145 : 195  
 (a) 42 (b) 35 (c) 30 (d) 24
7. 3222 : 7222 :: 3323 : ?  
 (a) 9949 (b) 8838  
 (c) 7727 (d) 2212
8. Wood is related to charcoal. In the same way,  
 as coal is related to  
 (a) Fire (b) Smoke  
 (c) Coke (d) Ash
9. Cobra : Snake :: Leopard : ?  
 (a) Tiger (b) Lion  
 (c) Cat (d) Zebra

**Directions (Q.Nos. 10-18)** Select the one which is different from the other three responses?

10. (a) AEFJ (b) EHIL  
 (c) KOPT (d) VYZD
11. (a) TREAT (b) LATER  
 (c) TABLE (d) RATES
12. (a) M5S (b) B9L  
 (c) T4Y (d) F4J
13. (a) 140 (b) 240  
 (c) 360 (d) 480
14. (a) 21 - 49 (b) 24 - 64  
 (c) 25 - 54 (d) 81 - 36
15. (a) 7 : 18 (b) 9 : 26  
 (c) 11 : 36 (d) 13 : 42
16. (a) Needle : Prick (b) Gun : Fire  
 (c) Auger : Bore (d) Chisel : Carve
17. (a) Metropolis (b) Home  
 (c) Town (d) Village
18. (a) Crane (b) Flamingo  
 (c) Cuckoo (d) Curlew
19. Arrange the following words according to English dictionary.

1. Brook 2. Bandit  
 3. Boisterous 4. Baffle  
 (a) 2, 4, 3, 1 (b) 1, 2, 3, 4  
 (c) 4, 1, 3, 2 (d) 4, 2, 3, 1

20. Which letter in the alphabet is as far from G as T is from M?  
 (a) M (b) N  
 (c) O (d) P
21. Which one of the following letter series when sequentially placed at the gaps in the given letter series shall complete it?  
 \_ a b a \_ \_ b a \_ a b  
 (a) abbbba (b) abbb  
 (c) baabb (d) bbaba

**Directions (Q.Nos. 22-26)** Choose the correct alternative from the given ones that will complete the series.

22. AZ, CX, FU, \_ ? \_  
 (a) IR (b) IV  
 (c) JQ (d) KP
23. DEF, HIJ, MNO, ?  
 (a) STU (b) RST  
 (c) RTV (d) TUV
24. D - 4, F - 6, H - 8, J - 10, ?  
 (a) K - 12, M - 13 (b) L - 12, M - 14  
 (c) L - 12, N - 14 (d) K - 12, M - 14
25. 2, 2, 5, 13, 28, ?  
 (a) 49 (b) 50  
 (c) 51 (d) 52
26. 13, 35, 57, 79, 911, ?  
 (a) 1110 (b) 1112  
 (c) 1113 (d) 1315
27. Find the wrong number in the given series.  
 46080, 3840, 384, 48, 24, 2, 1  
 (a) 384 (b) 48  
 (c) 24 (d) 2
28. Pointing out to a lady, Rajan said, "She is the daughter of the woman who is the mother of the husband of my mother." Who is the lady to Rajan?  
 (a) Aunt (b) Grand daughter  
 (c) Daughter (d) Sister
29. Nitin ranks 18th in a class of 49 students. What is his rank from the last?  
 (a) 18 (b) 19  
 (c) 31 (d) 32
30. Select the word which cannot be formed from the original word.  
 CONCENTRATE  
 (a) TREAT (b) REASON  
 (c) CENTRE (d) CONCERN

31. Select the word which can be formed from the original word?  
EXAMINATION  
(a) ANIMAL (b) EXAMINER  
(c) NATIONAL (d) ANIMATION

32. If ROBUST is written as QNATRS, which word would be written as ZXCMP in the following?  
(a) BZEOR (b) AYDNO  
(c) AWDLQ (d) YYBNO

33. If ACNE can be written as 372911 then, BOIL will be written as  
(a) 5291927 (b) 5291925  
(c) 5312125 (d) 5311925

34. If + means  $\times$ ,  $\times$  means  $-$ , + means + and  $-$  means  $+$ , then which of the following gives the result of  
 $175 - 25 + 5 + 20 \times 3 + 10 = ?$   
(a) 77 (b) 160 (c) 240 (d) 2370

35. Which of the following interchange of signs would make the given equation correct?  
 $5 + 3 \times 8 - 12 + 4 = 3$   
(a) + and - (b) - and +  
(c) + and  $\times$  (d) + and  $\div$

36. The total number of digits used in numbering, the pages of a book having 366 pages is  
(a) 732 (b) 990 (c) 1098 (d) 1305

**Directions** (Q.Nos. 37-38) Find out the missing numbers.

37.

8	17	33
12	5	29
10	13	?

(a) 9 (b) 23 (c) 33 (d) 43

38.

963	2	844
464	?	903

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

39. Gopal, starts from his house towards West. After walking a distance of 30 m, he turned towards right and walked 20 m. He then turned left and moving a distance of 10 m, turned to his left again and walked 40 m. He now turns to the left and walks 5 m. Finally the turns to his left. In which direction is he walking now?

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

40. A rat runs 20' towards East and turns to right, runs 10' and turns to right, runs 9' and again turns to left, runs 5' and then turns to left, runs 12' and finally turns to left and runs 6'. Now, which direction is the rat facing?  
(a) East (b) West  
(c) North (d) South

**Direction** (Q.No. 41) Two statements are given below, followed by two conclusions I and II. You have to consider the statements to be true if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements, indicate your answer.

41. **Statement** Any young man who makes dowry as a condition for marriage, discredits himself and dishonours womanhood.

**Conclusions**

- Those who take dowry in marriage should be condemned by society.
- Those who do not take dowry in marriage respect womanhood.

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

**Direction** (Q.No. 42) Two statements are given followed by four conclusions I, II, III and IV. You have to consider the statements to be true if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements. Indicate your answer.

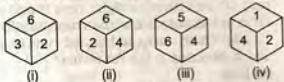
42. **Statements** All guilty politicians were arrested. Kishan and Chander were among those arrested.

**Conclusions**

- All politicians are guilty.
- All arrested people are politicians.
- Kishan and Chander were not politicians.
- Kishan and Chander were guilty.

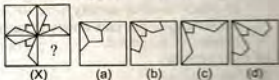
(a) Only I follows  
(b) Only II follows  
(c) II and III follow  
(d) III and IV follow

43. The four positions of a dice are given below

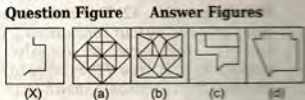


Which number is on the face opposite to 6?

- (a) 1  
 (b) 2  
 (c) 3  
 (d) 4
44. If the following words are arranged in their natural sequence, which of the words will be in first and third place?  
 Doctor, Fever, Medicine  
 (a) Fever, Doctor  
 (b) Doctor, Medicine  
 (c) Medicine, Fever  
 (d) Fever, Medicine
45. Which answer figure will complete the pattern of question figure?

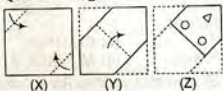


46. Select the figure in which question figure is hidden embedded?

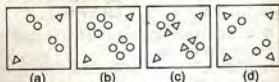


47. A piece of paper is folded and cut as shown below in the question figure. From the given answer figures, indicate how it will appear when opened?

### Question Figures

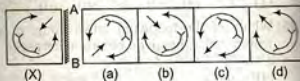


### Answer Figures

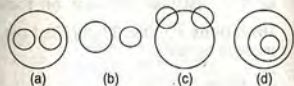


48. Which one of the following answer figures is exactly the mirror image of the given question figure, when the mirror is held on the line AB?

### Question Figure Answer Figures



49. Which of the following diagram best depicts the relationship among Dog, Tiger and Carnivores?



50. Study the matrix given and then answer the question given below it.

A	5	9	8	7
B	8	6	9	7
C	7	4	2	8
D	2	3	8	9

- What will be the code of the word 'BAC'?
- (a) 2, 5, 7 (b) 7, 8, 2 (c) 9, 8, 3 (d) 4, 6, 2

## Part B General Awareness

51. World Bank helps countries with loans for the purpose of
- reconstruction and development
  - stimulating private investment
  - tailoring foreign exchange crises
  - meeting deficits in government budget
52. Opportunity cost of production of a commodity is
- the cost that the firm could have incurred when a different technique was adopted
  - the cost that the firm could have incurred under a different method of production
  - the actual cost incurred
  - the next best alternative output sacrificed
53. A firm sells new shares worth ₹ 1000 direct to individuals. This transactions will cause
- Gross National Product to rise by ₹ 1000
  - Gross Domestic Product to rise by ₹ 1000
  - National Income to rise by ₹ 1000
  - No impact on Gross National Product
54. NABARD was established in the
- Fourth Five Year Plan
  - Fifth Five Year Plan
  - Sixth Five Year Plan
  - Eight Five Year Plan
55. In India, population density is defined as the number of persons
- per square mile
  - per square kilometre
  - per lakh square mile
  - per lakh square kilometre
56. The Finance Commission is primarily concerned with recommending to the President about
- the principle governing grants-in-aid to be given to the states
  - distributing the net proceeds of the taxes between the centre and the states
  - Both 'a' and 'b'
  - Neither 'a' nor 'b'
57. Which is not a Central Service?
- Indian Police Service ((IPS)
  - Indian Foreign Service (IFS)
  - Indian Audit and Accounts Service (IAAS)
  - Indian Revenue Service (IRS)
58. Now-a-days the Election Commission of India uses EVM during the general election in the country. What is the full form of EVM?
- Electronic Voting Machine
  - Election Validation Machine
  - Electronic Validation Management
  - Early Voting Movement
59. The first Indian State which was created on a linguistic basis following along drawn agitation is
- Andhra Pradesh
  - Asom
  - Tamil Nadu
  - Karnataka
60. Which one of the following cannot be suspended or restricted even during national emergency?
- Right to reside and settle in any part of the country
  - Right to life and personal liberty
  - Right to move freely throughout the territory of India
  - Right to carry on any profession or business
61. Who among the following were the leaders of the Indigo Revolt?
- Digambar Biswas and Bishnu Biswas
  - Budhu Bhagat and Jhindari Manli
  - Dinbandhu Mitra and Madhusudan Dutt
  - Birsa Munda and Gaya Munda
62. The first session of the Indian National Congress was shifted from Poona to Bombay almost at the eleventh hour because
- the leaders of the Bombay presidency association were against holding the first meeting of the congress at Poona
  - the Bombay Governor agreed to A.O. Hume's proposal to act as first president of the congress
  - Bombay as the capital of the presidency would help the conference attract more attention if it was held there
  - an outbreak of cholera in Poona forced the organizers of the congress to shift its venue from Poona to Bombay



63. Who of the following was the first Muslim President of Indian National Congress?  
 (a) Badaruddin Tayabji  
 (b) Abul Kalam Azad  
 (c) Rafi Ahmed Kidwai  
 (d) MA Ansari
64. The Anushilan Samiti was  
 (a) dedicated to the upliftment of women  
 (b) promoting widow remarriage  
 (c) interested in labour welfare  
 (d) a revolutionary organisation
65. In ends and means relationship, Gandhiji believed  
 (a) means determine the ends  
 (b) means become good if they serve the ends  
 (c) ends is everything, no matter what or how the means are  
 (d) ends and means are watertight compartments
66. The Great Barrier reef is  
 (a) conglomeration of Corals in Australian waters  
 (b) mountains range in Utah, USA  
 (c) salt hills of Afghanistan  
 (d) sub-oceanic mountain in South China Sea
67. Which of the following pairs of straits and the countries they separate is wrongly matched?  
 (a) Gibraltar Strait — Spain and Morocco  
 (b) Bering Strait — Sumatra and Malaysia  
 (c) Magellan Strait — Chile and Tierra del Fuego  
 (d) Bass Strait — Australia and Tasmania
68. The Panama Canal links  
 (a) Mediterranean Sea with Red Sea  
 (b) Atlantic Ocean with Indian Ocean  
 (c) Indian Ocean with Mediterranean  
 (d) Atlantic Ocean with Pacific Ocean
69. In the mesosphere, the atmosphere reaches its coldest temperatures (about -90° C) at a height of approximately  
 (a) 80 km (b) 50 km  
 (c) 60 km (d) 100 km
70. Which of the following statements is/are correct?  
 (a) The main gases within the Earth's exosphere are the lightest gases, mainly hydrogen, with some helium, carbon dioxide and atomic oxygen near the exobase  
 (b) The exosphere is the last layer before space  
 (c) Since there is no clear boundary with space and the exosphere, the exosphere is sometimes used synonymously with outer space  
 (d) All of the above
71. Weight of an animal body is mostly the weight of  
 (a) water (b) blood  
 (c) bone (d) tissue
72. The number of essential amino acid found in man  
 (a) 15 (b) 20  
 (c) 30 (d) 40
73. Consider the following  
 Enzyme and protein can be correlated with each other in following ways  
 (1) All proteins are enzyme.  
 (2) All enzymes are protein.  
 (3) All enzymes are not protein.  
 (4) All proteins are not enzyme.  
 Which of the Statements given above are correct?  
 (a) 1, and 3 (b) 2 and 4  
 (c) 1, 2 and 3 (d) 2, 3 and 4
74. When we eat something or we like, our mouth waters. This is actually not water but fluid secreted from  
 (a) masal gland  
 (b) oval epithelium  
 (c) salivary gland  
 (d) tongue
75. The elements found in bone and teeth are  
 (a) potassium and calcium  
 (b) calcium and magnesium  
 (c) calcium and phosphorus  
 (d) phosphorus and sulphur
76. Thyroid gland is activated by which hormone for the secretion of thyroxin  
 (a) TSH (b) FSH  
 (c) LTN (d) ACTH
77. Consider the following statements  
 In a nuclear reactor, self sustained chain reaction is possible, because  
 1. More neutrons are related in each of the fission reaction.  
 2. The neutrons immediately take part in the fission process.

3. The fast neutrons are slowed down by graphite.

4. Every neutron released in the fission reaction initiates fission.

Which of the statements given above are correct?

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

78. A transistor is made of

- (a) intrinsic semiconductors  
(b) doped semiconductors  
(c) a metal piece sandwiched between two intrinsic semiconductors  
(d) None of the above

79. What is the difference between a CFL and a LED lamp?

1. To produce light, a CFL uses mercury vapour and phosphor while a LED lamp uses semi-conductor material.
2. The average life span of a CFL is much longer than of and LED lamp.
3. A CFL is less energy efficient as compared to a LED lamp.

Which of the statements given above is/are correct?

- (a) Only 1  
(b) 2 and 3  
(c) 1 and 3  
(d) All of the above

80. What is the most commonly used substance in fluorescent tubes?

- (a) Sodium oxide and argon  
(b) Sodium vapour and neon  
(c) Mercury vapour and argon  
(d) Mercury oxide and neon

81. C, BASIC, COBOL and Java are examples of ..... language.

- (a) low level  
(b) computer  
(c) system programming  
(d) high level

82. .... is approximately one billion bytes.

- (a) Kilobyte                      (b) Bit  
(c) Gigabyte                      (d) Megabyte

83. Diagonal relationship is shown by

- (a) elements of 1st period  
(b) elements of 2nd period  
(c) elements of 3rd period  
(d) None of the above

84. The long form of periodic table consist of

- (a) 8 horizontal and 7 vertical series  
(b) 7 horizontal and 18 vertical series  
(c) 7 horizontal and 7 vertical series  
(d) 8 horizontal and 8 vertical series

85. Blood has been found isotonic with

- (a) saturated solution of NaCl  
(b) saturated solution of KCl  
(c) saturated solution of 1.1 mixture of NaCl and KCl  
(d) normal solution of NaCl

86. At high altitudes the boiling point of water lowers because

- (a) atmospheric pressure is low  
(b) atmospheric pressure is high  
(c) temperature is low  
(d) None of the above

87. Denaturation is the process in which

- (a) poisonous urea is removed from the blood and it occurs in kidneys  
(b) amino acid are absorbed from digested food and it occurs in intestinal villi  
(c) amino acids are broken down to produce urea and it occurs in liver  
(d) amino acids are synthesized and it occurs in ribosomes

88. When a plant is considered for tissue culture, one pore requisites is that it has to disease free. What is the other?

- (a) The leaves should be green  
(b) It should have high productivity  
(c) It should look strong  
(d) The stump should be thick

89. Name the gas released from landfills, decaying organic matter under shallow water in Marshes and bogs, flooded paddy fields, by ruminant animals and termites and by the burning of biomass. A molecule of this gas has 21 times more global warming potential than a molecule of CO<sub>2</sub>.

- (a) Sulphur dioxide  
(b) Methane  
(c) Ammonia  
(d) Nitrous oxide

90. The wildlife week is celebrated from

- (a) 2-8 October  
(b) 1-7 June  
(c) 16-22 April  
(d) 14 -20 January

91. Who among the following is not a recipient of Bharat Ratna?
- (a) Dr. S. Radhakrishnan  
(b) Sardar Vallabhbhai Patel  
(c) Mrs. Indira Gandhi  
(d) Lal Bahadur Shastri
92. Saraswati Samman is given annually for outstanding contribution to
- (a) literature  
(b) education  
(c) fine arts  
(d) classical music
93. 24 Brand Mantras, is a book written by
- (a) Bimal Choudhary  
(b) Shiv Khera  
(c) Arindam R Chaudhary  
(d) Jagdeep Kapoor
94. The poetic work 'Rashmirathi' was written by
- (a) Maithilisharan Gupt  
(b) Mahadevi Verma  
(c) Ramdhari Singh Dinkar  
(d) Surya Kant Tripathi Nirala
95. Consider the following countries
1. Brunei Darussalam
  2. East Timar
  3. Laos
- Which of the above is/are member(s) of ASEAN?
- (a) Only 1  
(c) 1 and 3
- (b) 2 and 3  
(d) All of these
96. Where is the headquarters of African Development Bank?
- (a) Abidjan  
(c) Namibia
- (b) Niger  
(d) Nigeria
97. The headquarters of UNESCO is at
- (a) Rome  
(c) Paris
- (b) Geneva  
(d) New York
98. CDMA—technology used in mobile phones stand for
- (a) Computer Developed Management Application  
(b) Code Division Multiple Application  
(c) Code Division Multiple Access  
(d) Code Division Mobile Application
99. The first women to become a Chief Minister of any State in India was
- (a) Nandini Satpatty  
(b) Dr. J Jayalalitha  
(c) Sucheta Kripalani  
(d) Mayawati
100. Aryabhata was India's renowned
- (a) poet  
(b) physicist  
(c) mathematician  
(d) medical practitioner

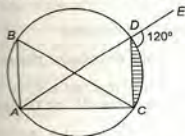
## Part C Quantitative Aptitude

101. If the sum of a number of two digits and a numbers formed by reversing the digits is 99, then what is the sum of the digits of the original number?
- (a) 9  
(c) Cannot be known
- (b) 81  
(d) 18
102. What is the unit number in the value of  $(729)^{99}$ ?
- (a) 9  
(c) 7
- (b) 8  
(d) 6
103. If one third part of a tank is filled with water, it contains 80 L water. How much water is required for filling the half of the tank?
- (a) 20 L  
(c)  $\frac{8}{3}$  L
- (b) 120 L  
(d) 100 L
104.  $(92)^2 - 65^2$  is divisible by
- (a) 17  
(c) 10
- (b) 11  
(d) 59
105. The HCF of two numbers is 8. Which one of the following can never be their LCM?
- (a) 48  
(c) 60
- (b) 56  
(d) 24
106. A 4 cm cube is cut into 1 cm cubes. What is the percentage increase in the surface area after such cutting?
- (a) 4%  
(c) 75%
- (b) 300%  
(d) 400%
107. If the diagonal and the area of a rectangle are 25 m and  $168 \text{ m}^2$ , what is the length of the rectangle?
- (a) 17 m  
(c) 12 m
- (b) 31 m  
(d) 24 m

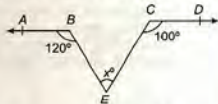


108. A square sheet of paper is converted into a cylinder by rolling it along its length. What is the ratio of the base radius to the side square?
- (a)  $\frac{1}{2\pi}$  (b)  $\frac{\sqrt{2}}{\pi}$  (c)  $\frac{1}{\sqrt{2}\pi}$  (d)  $\frac{1}{2}$
109. A 5 cm cube is cut into as many 1 cm cubes as possible. What is the ratio of the surface area of the larger cube to that of the sum of the surface areas of the smaller cubes?
- (a) 1 : 6 (b) 1 : 5  
(c) 1 : 25 (d) 1 : 125
110. What will be the area of a circle whose perimeter is 88 cm?
- (a)  $576 \text{ cm}^2$   
(b)  $616 \text{ cm}^2$   
(c)  $636 \text{ cm}^2$   
(d) Cannot be determined
111. If  $\frac{1}{4}$ th area of a rectangular plot is  $2700 \text{ sq m}$  and the width of that plot is 90 m. What is the ratio between the width and the length of the plot?
- (a) 3 : 4 (b) 4 : 3  
(c) 3 : 1 (d) 1 : 3
112. One angle of a right angle triangle is  $35^\circ$ . Which of the following is one of its angles?
- (a) 45  
(b) 60  
(c) 55  
(d) Cannot be determined
113. If 45 men can complete a work in 30 days working 12 h a day, in how many days will 60 men complete the work, working 10 h a day?
- (a) 31 (b) 29 (c) 25 (d) 27
114. If  $\frac{3}{5}$  part of a work is done by 12 men in 10 days, how many men will complete the whole work in 20 days?
- (a) 9 (b) 8 (c) 10 (d) 7
115. A merchant marks his goods up by 60% and then offers a discount on the marked price. If the final selling price after the discount results in the merchant making no profit or loss, what was the percentage discount offered by the merchant?
- (a) 60%  
(b) 40%  
(c) 37.5%  
(d) Depends on the cost price
116. A trader makes a profit equal to the selling price of 75 articles when he sold 100 of the articles. What percentage of profit did he make in the transaction?
- (a) 33.33% (b) 75%  
(c) 300% (d) 150%
117. The ratio between boys and girls in a school is 4 : 6 respectively. If the number of boys is increased by 200 the ratio becomes 5 : 6 respectively. How many girls are there in the school?
- (a) 1200  
(b) 800  
(c) 1000  
(d) Cannot be determined
118. The monthly salary of Preeti is ₹ 20000, which is ₹ 2000 less than the salary of Meeta. What is ratio between the salary of Preeti and Meeta respectively?
- (a) 11 : 10 (b) 9 : 10  
(c) 10 : 9 (d) 10 : 11
119. The average of 5 quantities is 10 and the average of 3 of them is 9. What is the average of the remaining 2?
- (a) 11 (b) 12  
(c) 11.5 (d) 12.5
120. Average cost of 5 apples and 4 mangoes is ₹ 36. The average cost of 7 apples and 8 mangoes is ₹ 48. Find the total cost of 24 apples and 24 mangoes.
- (a) 1044 (b) 2088  
(c) 720 (d) 324
121. A piece of equipment cost a certain factory ₹ 600000. If it depreciates in value, 15% the first year, 13.5% the second year, 12% the third year and so on, what will be its value at the end of 10 yr, all percentages applying to the original cost?
- (a) 200000 (b) 105000  
(c) 405000 (d) 650000
122. A, B and C enter into a partnership by investing ₹ 3600, ₹ 4400, and ₹ 2800. A is a working partner and gets a fourth of the profit for his services and the remaining profit is divided amongst the three in the rate of their investments. What is the amount of profit that B gets if A gets a total of ₹ 8000?
- (a) 4888.88 (b) 9333.33  
(c) 4000 (d) 3666.66

123. A trader buys goods at a 19% discount on the label price. If he wants to make a profit of 20% after allowing a discount of 10%, by what percentage should his marked price be greater than the original label price?  
 (a) + 8% (b) - 3.8%  
 (c) + 33.33% (d) None of these
124. A mixture of 40 L of milk and water contain 10% water. How much water must be added to make water 20% in the new mixture?  
 (a) 10 L (b) 7 L  
 (c) 5 L (d) 3 L
125. The speed of a motor boat itself is 20 km/h and the rate of flow of the river is 4 km/h. Moving with the stream the boat went 120 km. What distance will the boat cover during the same time going against the stream?  
 (a) 80 (b) 180  
 (c) 60 (d) 100
126. A sum of money invested for a certain number of years at 8% per annum simple interest grows to ₹ 180. The same sum of money invested for the same number of years at 4% per annum simple interest grows to ₹ 120 only. For how many years was the sum invested?  
 (a) 25 yr  
 (b) 40 yr  
 (c) 33 yr and 4 months  
 (d) Cannot be determined
127. The value of  $5\frac{1}{3} + 1\frac{2}{9} \times \frac{1}{4} \left( 10 + \frac{3}{1 - \frac{1}{5}} \right)$  is  
 (a)  $\frac{67}{25}$  (b) 15  
 (c)  $\frac{128}{11}$  (d)  $\frac{128}{99}$
128. A shopkeeper mixed 3 kg of tea powder a ₹ 180 per kg with 2 kg of tea powder a ₹ 130 per kg, if he sells the mixture at ₹ 216 per kg. What is his profit percentage?  
 (a) 25% (b) 32%  
 (c) 35% (d) 37%
129. If an amount of ₹ 85602 is distributed equally amongst 33 persons. How much amount would each person get?  
 (a) ₹ 2594 (b) ₹ 2954  
 (c) ₹ 2549 (d) ₹ 2495
130. The ratio of milk to water in three containers, each with similar capacity are 3 : 2, 7 : 3 and 11 : 4 respectively. If the contents of all three containers are emptied into a single vessel, then proportion of milk and water in it will be  
 (a) 61 : 29 (b) 61 : 30  
 (c) 5 : 4 (d) 29 : 61
131. Pushpa purchased 170 kg of Jowar at ₹ 5.80 per kg and mixes it with 130 kg of Jowar purchased at ₹ 5.30 per kg. She sells the mixture to earn a profit of ₹ 1.61 per kg. What should be the selling price of mixture per kg?  
 (a) ₹ 5.12 (b) ₹ 5.68  
 (c) ₹ 5.82 (d) ₹ 5.58
132. In the given figure, measure of  $\angle ABC$  is



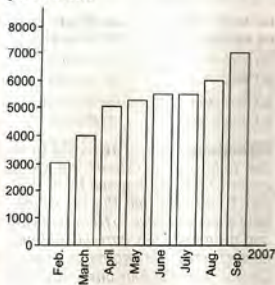
- (a)  $20^\circ$  (b)  $40^\circ$  (c)  $60^\circ$  (d)  $80^\circ$



- (a) 60 (b) 50  
 (c) 40 (d) 70

137. The value of  $\sin^2 \frac{2\pi}{15} - \sin^2 \frac{\pi}{30}$  is  
 (a)  $(\sqrt{5}-1)/4$  (b)  $(\sqrt{5}-1)/8$   
 (c)  $(\sqrt{5}+1)/\sqrt{3}/2$  (d)  $(\sqrt{5}-1)\frac{\sqrt{3}}{2}$
138. If  $\sin \theta = \frac{-3}{5}$  and  $\theta$  lies in the third quadrant, then the value of  $\cos\left(\frac{\theta}{2}\right)$  is  
 (a)  $\frac{1}{5}$  (b)  $\frac{-1}{\sqrt{10}}$   
 (c)  $\frac{-1}{5}$  (d)  $\frac{1}{\sqrt{10}}$
139. The value of  $\sin 50^\circ - \sin 70^\circ + \sin 10^\circ$  is  
 (a) 0 (b) 1  
 (c) 2 (d) None of these
140. The Moon's distance from the Earth is 350000 km and its diameter subtends an angle of  $31'$  at the eye of the observer. The diameter of the Moon is  
 (a)  $3157 \frac{11}{27}$  km (b)  $315 \frac{11}{27}$  km  
 (c)  $3050 \frac{11}{27}$  km (d) None of these
141. The value of  $(\sqrt{3} \operatorname{cosec} 20^\circ - \sec 20^\circ)$  is  
 (a) 2 (b)  $2\sqrt{3}$   
 (c) 4 (d)  $\frac{\sqrt{8}}{2}$

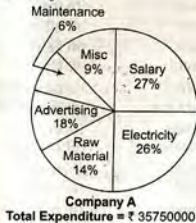
**Directions** (Q.Nos. 142-146) Study the following graph and answer the questions given below

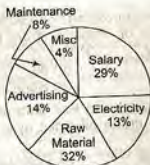


142. What is the approximate percentage increase in the price of crude oil from February to September?  
 (a) 100 (b) 80  
 (c) 130 (d) None of these
143. Which month(s) had less than one per cent increase in crude oil price over the earlier month?  
 (a) Only June (b) Only April  
 (c) August and April (d) Only May
144. Which months experienced more than 10 per cent but less than 20 per cent increase in the price of crude oil over the earlier month?  
 (a) June and September  
 (b) July and September  
 (c) April and July  
 (d) March and July
145. If in April the crude oil price would have been lesser than the given by ₹ 223 per metric tonne, then how much would have been the percentage increase in price over the earlier month?  
 (a) 10  
 (b) 12  
 (c) 14  
 (d) None of the above
146. In how many 6 months the increase in the price of crude oil was more than 10% with respect to the corresponding previous years?  
 (a) 2 (b) 3 (c) 4 (d) 5

**Directions** (Q.Nos. 147-150) Study following graph carefully to answer the questions given below.

**Expenditure incurred by two companies A and B in a year.**





Company B  
Total Expenditure = ₹ 40550000

147. What is the amount spent by company A on electricity?  
(a) ₹ 92950 (b) ₹ 9652500  
(c) ₹ 50050 (d) None of these

148. How much have both companies together spent on raw material?  
(a) ₹ 1651000 (b) ₹ 1545000  
(c) ₹ 17981000 (d) ₹ 18921000
149. On which item is there least expenditure? (irrespective of company A or B)  
(a) Miscellaneous  
(b) Advertising  
(c) Electricity  
(d) Maintenance
150. What is the total amount spent by company B on raw material, maintenance and salary together?  
(a) ₹ 2598400 (b) ₹ 16759300  
(c) ₹ 38467300 (d) ₹ 27979500

## Part D English Language

**Directions** (Q. Nos. 151-160) *In the following passage, there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, four words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.*

We all have read the story of two friends and a bear. Once two friends were passing through a ....(151).... forest. All of a sudden, a bear came out of its cave. It began to ....(152).... Both felt terrified. The fair-weather friend ran ....(153).... and climbed up a tall tree. The other laid himself on the ground and ....(154).... to be dead. The bear came and ....(155).... him. He ....(156).... him for dead and went away. Now the fair-weather friend climbed down the tree and said to his friend, "What did the bear ....(157).... into your ears?" He answered that the bear had advised him to ....(158).... of fair-weather friends. They were more dangerous than snakes. A true friend, on the other hand, is the medicine of life. He stands by us in ....(159).... and woe, thick and thin. A true friend ....(160).... his own pleasure and convenience for the sake of his friend.

- |                   |                |                   |              |
|-------------------|----------------|-------------------|--------------|
| 151. (a) volatile | (b) precarious | 158. (a) tired    | (b) afraid   |
| (c) dense         | (d) pugnacious | (c) envious       | (d) beware   |
| 152. (a) shout    | (b) roar       | 159. (a) nights   | (b) seasons  |
| (c) chirp         | (d) grunt      | (c) weal          | (d) scarcity |
| 153. (a) quick    | (b) hard       | 160. (a) foregoes | (b) discards |
| (c) toward        | (d) for        | (c) mitigates     | (d) directs  |
| 154. (a) alarmed  | (b) positioned |                   |              |
| (c) frightened    | (d) pretended  |                   |              |
| 155. (a) sniffed  | (b) tasted     |                   |              |
| (c) approached    | (d) reached    |                   |              |
| 156. (a) made     | (b) took       |                   |              |
| (c) found         | (d) felt       |                   |              |
| 157. (a) sound    | (b) pour       |                   |              |
| (c) mutter        | (d) whisper    |                   |              |

**Directions** (Q. Nos. 161-165) *In each of the following questions six words are given which are denoted by A, B, C, D, E and F. By using all the six words, each only once, you have to frame a meaningful and grammatically correct sentence. The correct order of words is the answer. Choose from the four alternatives the one having the correct order of words.*



161. A. eat  
C. raw  
E. meat  
(a) FBDAEC  
(c) FBADCE
162. A. different  
C. of  
E. kinds  
(a) BFEACD  
(c) DCAEBF
163. A. attitude  
C. swadeshi  
E. is  
(a) BAFDEC  
(c) CEAIFD
164. A. tool  
C. used  
E. flintstone  
(a) FCEBDA  
(c) EFCBAD
165. A. helps  
C. good  
E. exercise  
(a) EBDACF  
(c) BEADCF
- B. does  
D. not  
F. man  
(b) BDAFCE  
(d) FBDACE
- B. there  
D. vehicles  
F. are  
(b) AECDBF  
(d) BFAECD
- B. an  
D. mind  
F. of  
(b) CEBAFD  
(d) BAFDCE
- B. to  
D. make  
F. man  
(b) FECBDA  
(d) BDEFC A
- B. everyday  
D. keep  
F. health  
(b) CFBEAD  
(d) EFDCEA

**Directions** (Q.Nos. 171-175) *Pick out the most effective word from the given words to fill in the blanks to make the sentence meaningfully complete.*

171. Countless Indians today use neem twigs, called datun, as ..... toothbrushes.  
(a) durable (b) extended  
(c) saturated (d) disposable
172. I have always admired his ..... knowledge and scholarship.  
(a) highest (b) flexible  
(c) provocative (d) profound
173. The fight for liberation brings ..... the best and the noblest qualities in mankind.  
(a) with (b) in  
(c) for (d) out
174. Today, as citizens of free India, we ..... both our democracy and our secularism.  
(a) promote (b) cherish  
(c) establish (d) champion
175. Social customs and traditions die .....  
(a) absolutely (b) hard  
(c) fundamentally (d) permanently

**Directions** (Q. Nos. 176-180) *In each sentence given below one word has been printed in bold. Below the sentence four words are suggested one of which can replace the word printed in bold without changing the meaning of the sentence. Find out the appropriate word in each case.*

176. In a hole below a mango tree, a snake was **staying**.  
(a) halting (b) stopping  
(c) living (d) sitting
177. It was a **useless** attempt on her part to appear in this examination.  
(a) fruitful (b) unjustified  
(c) future (d) futile
178. He is going to **destroy** you.  
(a) ruin (b) spoil  
(c) dust (d) hit
179. He was **confident** that his plan would work well.  
(a) doubtful (b) careful  
(c) sure (d) upset
166. Most of the popular tele-serials are not only illogical (a)/ in their story line (b)/ but also crude in their presentation. (c) /No error (d)
167. I am trying to convince him (a)/ for the last two days to come (b)/ and live with me till his father's anger cools down. (c) / No error (d)
168. It is a pity that a son born from very good parents (a)/ should live a life of (b) / misery and deprivation of the worst order. (c) / No error (d)
169. I would have asked him to leave our house immediately (a)/if my father would not have been (b)/ at home and awake. (c) /No error (d)
170. Mala's two brothers Rupesh and Bhupat are very intelligent and hardworking (a)/ but I am sure (b)/ I like the latter most. (c) / No error (d)

180. This is the **proper** time to eat food.  
(a) wrong (b) accurate  
(c) exact (d) appropriate

**Directions** (Q.Nos. 181-185) *In each question given below, three words which are numbered (a), (b) and (c) have been printed of which one may be wrongly spelt. The number of that word is the answer. If all the three words are correctly spelt mark (d) i.e., 'All correct' as the answer.*

181. (a) Barricade (b) Checkmate  
(c) Accesible (d) All correct
182. (a) Providential (b) Sattelite  
(c) Precedence (d) All correct
183. (a) Cacophony (b) Exacerbate  
(c) Particuler (d) All correct
184. (a) Intervention  
(b) Ludicrous  
(c) Nymphomaniac  
(d) All correct
185. (a) Planatarium (b) Ridiculous  
(c) Severance (d) All correct

**Directions** (Q.Nos. 186-190) *Rearrange the following seven sentences A, B, C, D, E, F and G in the proper sequence to form a meaningful paragraph; then answer the questions given below them.*

- A. By the time they settled in Madhya Pradesh, they had become an Agrarian community.
- B. Cow was also used as a medium of exchange between different communities.
- C. It was jointly owned by the community.
- D. The important crops they cultivated there, included barley, rice, wheat, sugarcane, cotton and mustard.
- E. Later, the Aryans took to Agriculture.
- F. The early Aryans regarded cattle as their wealth.
- G. According to some scholars, the Aryans learnt the technique of agriculture from the non-Aryans.

186. Which of the following will be the **Last** sentence?  
(a) D (b) C  
(c) F (d) G

187. Which of the following will be the **Fourth** sentence?  
(a) B (b) C  
(c) D (d) E

188. Which of the following will be the **Sixth** sentence?  
(a) C (b) D  
(c) A (d) F

189. Which of the following will be the **First** sentence?  
(a) A (b) B  
(c) D (d) F

190. Which of the following will be the **Third** sentence?  
(a) A (b) B  
(c) C (d) D

**Directions** (Q.Nos. 191-200) *Read the following passage carefully and answer the questions given below it. Certain words are printed in bold in the passage to help you locate them while answering some of the questions.*

What is immediately needed today is the establishment of a World Government or an International Federation of Mankind. It is the utmost necessity of the world today, and all those persons who wish to see all human beings happy and prosperous naturally feel it keenly. Of course, at times we feel that many of the problems of our political, social, linguistic and cultural life would come to an end if there were one Government all over the world. Travellers, businessmen, seekers of knowledge and teachers of **righteousness** know very well that great **impediments** and obstructions are faced by them when they pass from one country to another, exchange goods, get information, and make an effort to spread their good gospel among their fellow-men. In the past, religious sects divided one set of people against another, colour of the skin or shape of the body set one against the other. But today when philosophical light has exploded the darkness that was created by religious differences, and when scientific knowledge has falsified the superstitions, they have enabled human beings of all religious views and of all races and colours to come in frequent contact with one another. It is the

governments of various countries that keep people of one country apart from those of another. They create artificial barriers, unnatural distinctions, unhealthy isolation, unnecessary fears and dangers in the minds of the common men who by their nature want to live in friendship with their fellow-men. But all these evils would cease to exist if there were one government all over the world.

- (a) Social problems
- (b) Political problems
- (c) Cultural problems
- (d) Economic problems

196. Choose the word which is most opposite in meaning to the word 'impediments' as used in the passage.

- (a) Handicaps
- (b) Furtherance
- (c) Providence
- (d) Hindrances

191. What is the urgent need of the world today?

- (a) The establishment of an international economic order
- (b) The establishment of a world government
- (c) The creation of a cultured international social order
- (d) The raising of an international spiritual army

197. The most appropriate title of the above passage may be

- (a) The Evils of the World Order
- (b) The Man can make his Destiny
- (c) The Need of World Government
- (d) The Role of Religion in the Modern Times

192. What divides people of a country against another?

- (a) Different religions
- (b) Different languages
- (c) Different social and political systems of different people
- (d) Governments of various countries

198. What was the factor, according to the passage, that set one man against another?

- (a) Material prosperity of certain people in the midst of grinding poverty
- (b) Superior physical strength of some persons
- (c) Colour of skin or shape of the body
- (d) Some people being educated and other illiterate

193. What will the world government be expected to do?

- (a) It will arrange for interplanetary contacts
- (b) It will end all wars for all time to come
- (c) It will bring about a moral regeneration of mankind
- (d) It will bring about universal happiness and prosperity

199. The theory of racial superiority stands falsified today by

- (a) knowledge derived from scientific advances
- (b) the ascendancy of people who were heretofore considered of inferior racial stock
- (c) the achievements of the so called backward countries in every field of life
- (d) the precedence given to the physical prowess of different races

194. Choose the word which is similar in meaning as the word 'righteousness' as used in the passage.

- (a) Rectitude
- (b) Religiosity
- (c) Requirement
- (d) Scrupulousness

200. In the past religious sects

- (a) united the people with one another
- (b) interfered in political affairs
- (c) did a good job by way of spreading message of love and peace
- (d) divided one set of people from another

195. Which of the following problems has not been mentioned in the passage as likely to be solved with the establishment of world government?