

Solved Paper

SSC Higher Secondary Level Data Entry Operator & LDC Exam

Held on—27-11-2010

PART-I

GENERAL INTELLIGENCE

Directions (1-9): In each of the following questions select the related letter / word / number / figure from the given alternatives.

- 83 : 25 :: 29 : ?
(a) 25 (b) 16
(c) 49 (d) 36
- VXZ : JLN :: GIK : ?
(a) QSO (b) QRS
(c) OQS (d) LMO
- ABZY : CDXW :: EFVU : ?
(a) IJRQ (b) KLPO
(c) MNST (d) GHST
- Receptionist : Office :: Hostess : ?
(a) Crew (b) Host
(c) Airport (d) Aircraft
- NUMBER : UNBMRE :: GHOST : ?
(a) HOGST (b) HOGTS
(c) HGOTS (d) HGSOT
- 6 : 35 :: 7 : ?
(a) 48 (b) 42
(c) 34 (d) 13

- Dog : Rabies :: Mosquito : ?
(a) Plague (b) Death
(c) Malaria (d) Sting
- 4 : 24 :: 17 : ?
(a) 37 (b) 47
(c) 57 (d) 67
- Clock : Time :: Thermometer : ?
(a) Heat (b) Radiation
(c) Energy (d) Temperature

Directions (10-18): In each of the following questions select the one which is different from the other three responses.

- (a) BGNI (b) CHOJ
(c) DIPL (d) EJQL
- (a) 20–36 (b) 30–46
(c) 50–56 (d) 60–65
- (a) September (b) April
(c) November (d) January
- (a) MKO (b) QSO
(c) VTX (d) DBF
- (a) (48, 6) (b) (21, 7)
(c) (24, 3) (d) (56, 7)

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15. (a) Carbon (b) Graphite
(c) Diamond (d) Gold
16. (a) 49 (b) 140
(c) 112 (d) 97
17. (a) XRMKL (b) XRMIF
(c) XRNLI (d) XSNLI
18. (a) Iron (b) Mercury
(c) Silver (d) Gold
19. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?
a _ b _ a _ b _ _ b a
(a) b b a a b (b) b b a b b
(c) a a b a b (d) a a b b a

Directions (20-24): A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.

20. 15, 17, 20, 22, 29, 2, ?
(a) 31, 38 (b) 36, 38
(c) 36, 43 (d) 38, 45
21. 6, 2, 15, 27, 51, 99
(a) 10 (b) 9
(c) 11 (d) 12
22. 2, 5, 8, 11, 14, ?
(a) 17 (b) 16
(c) 15 (d) 18
23. BDF, KMO, TVX, ?
(a) CEG (b) UVW
(c) XYZ (d) ACE
24. ZXUQL ?
(a) F (b) E
(c) G (d) H

Directions: From the given alternatives words, select the word which can be formed using the letters of the given word.

25. EXAMINATION
(a) EXAMINE (b) NAME
(c) MINOR (d) GAME
26. Mohini went to movies nine days ago. She goes to the movies only on Thursday. What day of the week is today?
(a) Saturday (b) Thursday
(c) Sunday (d) Tuesday
27. The age of a father is twice that of his son's at present age. After 5 years the sum of their ages will be 85. How old are they now?
(a) 40, 20 (b) 46, 23
(c) 60, 30 (d) 50, 25
28. Ramesh drives his car 4 km to east, then takes left turn and drives 6 km. He again turns to his left hand side and travels 4 km. How many km is Ramesh away from his starting place?
(a) 6km (b) 10km
(c) 4km (d) 14km
29. Ravi's father has a son Rohit who has an aunt Laxmi who has a husband Rao whose father-in-law is Mohan. What is the relation of Mohan to Ravi?
(a) Nephew (b) Grandfather
(c) Son (d) Uncle
30. If your 9th person in a square starting from one end and 11th from another end, what is the number of persons in the queue?
(a) 20 (b) 19
(c) 21 (d) 18
31. If BEAUTIFUL is written as CDOGHJKMN, how LEAF can be written in that code?
(a) NDOK (b) KNND
(c) ODNK (d) DKON
32. If A = 1, CAT = 24, then POLICE = ?
(a) 57 (b) 60
(c) 62 (d) 59

33. Five students are sitting in a row. 'T' is on the right of 'Z'. 'M' is one the left of 'Z' but is one the right of 'L'. 'T' is on the left of 'Q'. Who is sitting first from the left?

(a) Z (b) Q
(c) T (d) L

34. From the given alternative words, select the word which cannot be formed using the letters of the given word:

SUPERIORITY

(a) PURSE (b) PURSUIT
(c) PRIORITY (d) PURITY

35. Question Missing

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

36. Select the alternative which is related to the given set.

Given set is: (12, 18, 24)

(a) (6, 12, 30) (b) (5, 15, 10)
(c) (10, 16, 18) (d) (8, 12, 16)

37. In a solid cube which is made up of 27 small cubes, two opposite sides are painted red, two painted yellow and the other two painted white. How many cubes have two colours?

(a) 8 (b) 12
(c) 16 (d) 24

Directions (38-40): In each of the following questions one / two statements are given followed by two conclusions (I) and (II). You have to consider the two statements to be true even 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.

38. **Statements:**

Some books are Magazines.
Some Magazines are Novels.

Conclusions:

- (I) Some books are Novels.
(II) Some Novels are Magazines.
(a) Only (I) follows
(b) Only (II) follows
(c) Either (I) or (II) follows
(d) Neither (I) nor (II) follows

39. **Statements:**

"Bats do not lay eggs and therefore, bats are not birds.

Conclusions

- (I) All birds lay eggs.
(II) Only birds lay eggs.
(a) Only (I) follows
(b) Only (II) follows
(c) Both (I) and (II) follows
(d) Neither (I) nor (II) follows

40. **Statements:**

(I) All students like excursions.
(II) Some students like Laboratory experiments.

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

41. If '+' stands for '÷', '×' stands '+', '-' stands for '×', and '÷' stands for '-', then which of the following statements is correct?

(a) $36 \times 6 + 7 \div 2 - 6 = 20$
(b) $36 \div 6 + 3 \times 5 - 3 = 45$
(c) $36 + 6 - 3 \times 5 \times 3 = 24$
(d) $36 - 6 + 3 \times 5 \div 3 = 74$

42. If $4 - 4 = 17$, $6 - 6 = 37$ and $2 - 2 = 5$ then what is $5 - 5 = ?$

(a) 27 (b) 26
(c) 19 (d) 20

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43. In the following equation, select correct combination of mathematical signs to replace * signs and to balance the equation

$$16 * 4 * 5 * 9 * 1$$

- (a) $+\div=\times$ (b) $\div+=\times$
(c) $\times=+-$ (d) $+\times=\div$

Directions (44-45): Select the missing number from the given responses.

$$44. \begin{array}{r} 6 \quad 7 \quad 5 \\ 7 \quad 8 \quad 6 \\ 8 \quad 9 \quad ? \\ \hline 62 \quad 79 \quad 47 \end{array}$$

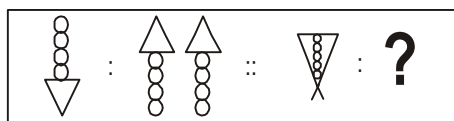
- (a) 4 (b) 7
(c) 8 (d) 9

$$45. \begin{array}{r} 9 \quad 4 \quad 5 \\ 12 \quad 16 \quad 15 \\ 15 \quad 20 \quad 25 \\ 180 \quad 80 \quad ? \end{array}$$

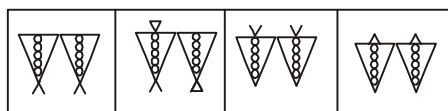
- (a) 125 (b) 75
(c) 20 (d) 25

Directions: Select the related figure from the answer figures.

46. Question Figures



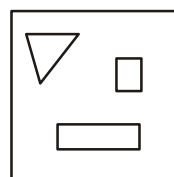
Answer Figures



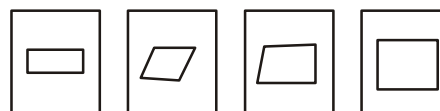
- (a) (b) (c) (d)

47. Among the four answer figures, which figure can be formed from the cut-pieces given below in the question figure?

Question Figure



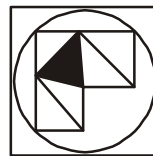
Answer Figures



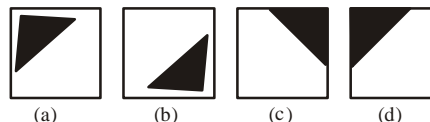
- (a) (b) (c) (d)

Directions: Which answer figure will complete the question figure?

48. Question Figure



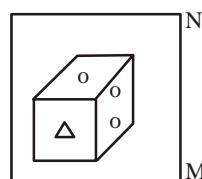
Answer Figures



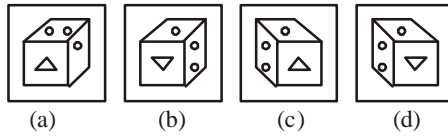
- (a) (b) (c) (d)

49. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given question figure?

Question Figure

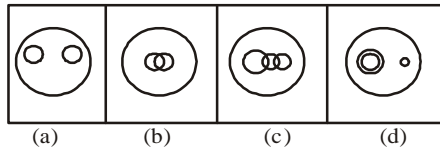


Answer Figures



50. Find out which of the diagrams as given in the alternatives correctly represents the relationship stated in the question.

Mountains, Forest, Earth



ANSWER SHEET

- | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (c) | 2. (c) | 3. (d) | 4. (d) | 5. (c) | 6. (a) | 7. (c) | 8. (a) | 9. (d) | 10. (c) |
| 11. (a) | 12. (d) | 13. (b) | 14. (b) | 15. (d) | 16. (a) | 17. (d) | 18. (d) | 19. (d) | 20. (d) |
| 21. (b) | 22. (a) | 23. (a) | 24. (a) | 25. (b) | 26. (a) | 27. (d) | 28. (a) | 29. (b) | 30. (b) |
| 31. (a) | 32. (b) | 33. (d) | 34. (b) | 35. (b) | 36. (d) | 37. (b) | 38. (b) | 39. (a) | 40. (c) |
| 41. (d) | 42. (b) | 43. (b) | 44. (b) | 45. (b) | 46. (c) | 47. (a) | 48. (d) | 49. (c) | 50. (a) |

PART-II**ENGLISH LANGUAGE**

Directions (51-55): In the following questions some of the sentences have errors and some have none. Find out which part of a sentence has an error. If there is no error, your answer is (4) i.e. No error.

51. The Principal and staff (1) / are awaiting for (2) / the chief guest (3) / No error (4).
52. He thinks (1) / himself (2) as a great scholar. (3) / No Error (4).
53. Unless (1) you will study hard (2) / you cannot pass. (3) / No error (4).
54. I like (1) / the poetries (2) / of Byron and Shelley. (3) / No error (4).
55. On last Sunday (1) / I met my friend (2) / accidentally. (3) / No error (4).

Directions (56-60): In the following 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 alternatives out of the four.

56. You may bring your dog where _____.
 (a) you have to pay
 (b) there is no water
 (c) pets are allowed
 (d) pets can sleep
57. The chief was wondering _____.
 (a) when to brush his teeth
 (b) what to prepare for the important dinner
 (c) how to wash the dishes
 (d) when to take the dog for a walk
58. I have brought some books _____, you to examine.
 (a) to (b) for
 (c) with (d) over
59. The speaker did not properly space out his speech, but went on ____ one point only.
 (a) stressing (b) avoiding
 (c) devoting (d) decrying
60. The usher showed us _____.
 (a) how to take photographs
 (b) where to sit
 (c) when to comb out hair
 (d) how to dance

Directions (61-65): In the following questions, out of the four alternatives, choose the one which best expresses the meaning of the given word.

61. Autocratic
 (a) Cooperative (b) Dictatorial
 (c) Inspirational (d) Charitable
62. Daring
 (a) Brilliant (b) Energetic
 (c) Enthusiastic (d) Courageous
63. Demonstrate
 (a) Remonstrate (b) Show
 (c) Witness (d) Complain

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64. Deliberate
 (a) Purposeless (b) Perpetrate
 (c) Intentional (d) Intervention
65. Defer
 (a) Postpone (b) Different
 (c) Accept (d) Disagree

Directions (66-70): In the following questions, choose the word opposite in meaning to the given word.

66. Abundance
 (a) Scanty (b) Tiny
 (c) Scarcity (d) Deficient
67. Unanimity
 (a) Amity (b) Enmity
 (c) Disagreement (d) Dissatisfaction
68. Vice
 (a) Fame (b) Virtue
 (c) Fortune (d) Fate
69. Renowned
 (a) Famous (b) Owned
 (c) Unowned (d) Unknown
70. Provoke
 (a) Soothe (b) Incite
 (c) Smoothen (d) Entice

Directions (71-75): In the following 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 idiom/phrase.

71. Tagore was **a man of letters**.
 (a) of wide contacts
 (b) an excellent letter dictator
 (c) a great writer of letters
 (d) proficient in literary art

72. His friends beat the boy **to pay off old scores**.
 (a) to refund old dues
 (b) to take revenge
 (c) to force him to be a scorer in a match
 (d) because he had not scored well earlier
73. Chintan is so innocent that he **wears his heart on his sleeve**.
 (a) Wears dress that does not match
 (b) Expresses his feelings openly
 (c) Wears colourful dresses
 (d) Expresses his feelings with the shape of a heart printed on its sleeve
74. It was **a red letter day** in history of the world.
 (a) a day with bloodshed.
 (b) A dangerous not about the destruction
 (c) A day memorable for some joyful event
 (d) A day with love and warmth
75. The poor subordinates are make **scapegoats** by their superiors.
 (a) punished or others misdeeds
 (b) developed poor relations
 (c) treated humbly and respectfully
 (d) scolded with arrogant reactions

Directions (76-80): In the following questions, a part of the sentence is printed in **bold**. Below are given alternatives to the **bold** part at (1), (2) and (3) which may improve the sentence. Choose correct alternative. In case no improvement needed your answer is (4).

76. She has red Oliver Twist when she **had been** fourteen years old.
 (a) had become (b) has become
 (c) was (d) No improvement
77. Children like to eat sweets, **isn't it?**
 (a) do they? (b) Is it?
 (c) Don't they? (d) No improvement

78. He took **disadvantage** of the situation and cheated many people.
 (a) chance (b) advantage
 (c) disapproval (d) No improvement
79. He was so afraid that his knees knocked on **another**.
 (a) one against (b) each other
 (c) both (d) No improvement
80. All the candidates will **give** a test on Friday.
 (a) appear (b) take
 (c) accept (d) No improvement

Directions (81-85): In the following questions, out of the four alternatives, choose the one which can be substituted for the given words / sentences.

81. A person who is physically dependent on a substance.
 (a) Criminal (b) Martyr
 (c) Gladiator (d) Addict
82. A child born after the death of its father is called
 (a) An orphan (b) A deprived child
 (c) A waif (d) A posthumous child
83. A movement of part of the body to express an idea or feeling
 (a) Jibe (b) Gesture
 (c) Pose (d) Mimicry
84. A legal agreement by which a person borrows money from a bank usually to buy a house
 (a) Document (b) Mortgage
 (c) Lease (d) Invoice
85. Failing to discharge one's duty
 (a) Debacle (b) Dereliction
 (c) Determination (d) Deterrent

Directions (86-95): 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.

A seminar is generally a form of (86) interaction, either at an academy (87) or a commercial or (88) organisation. It has the function of (89). Small groups for (90) meetings, focusing each time on some (91) subject, in which everyone present in (92) to participate. This is often (93) through and ongoing dialogue with a seminar (94) or instructor. Normally participants must not be (95) in the field under discussion.

86. (a) academic (b) social
 (c) informal (d) artificial
87. (a) institution (b) intermission
 (c) intervention (d) interference
88. (a) provincial (b) proverbial
 (c) professional (d) progressive
89. (a) bringing out
 (b) bringing together
 (c) bringing among
 (d) bringing off
90. (a) recurring (b) repeating
 (c) reverting (d) reforming
91. (a) particular (b) partial
 (c) previous (d) prevented
92. (a) entrusted (b) encouraged
 (c) enlarged (d) endured
93. (a) accomplished (b) acknowledged
 (c) acquainted (d) acquired
94. (a) follower (b) member
 (c) leader (d) associate
95. (a) professional (b) teacher
 (c) starter (d) beginners

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Directions (96-100): In the following questions, you have one brief passage with 5 questions following the passage. Read the passage carefully and choose the best answer to each question out of the four alternatives.

PASSAGE

India records the world's highest per-capita incidence of water-borne diseases such as diarrhea, typhoid and hepatitis, in spite of which concern for safe drinking water is still abysmally low even among educated Indians. This alarming indifference was borne out in a survey conducted by market research agency Research International Ltd. Based on a study of 3,000 households spread across all major cities in India. The survey found that over 73 per cent of all households in the highest income categories (SEC A & B) drink tap water without boiling it and as many as 55 per cent of the same group drink tap water after filtration through a cloth, but without boiling.

Though every school child knows that unboiled tap water contains un-seen disease causing germs, and is unsafe to drink, the high level of indifference to boiling water will come as a surprise to many. Comments Dr. S.S. Narvekar, Deputy Director, Directorate of Health Services, Government of Maharashtra. "We regularly monitor water quality in all major urban centres in this State. During 1995-96, we found that 9,730 out of 159,233 samples of water were contaminated with disease causing organisms, representing a high 6.11 per cent of the total number of samples collected and analysed. This is an alarmingly high level of contamination considering that Maharashtra is one of the more developed states in India and it may be higher in other states. Also during late summer months when there is water scarcity, and during these months it is doubly important to ensure drinking water is adequately sanitised."

96. In India the concern of safe drinking water is:
(a) very low (b) good
(c) enough (d) more than expected
97. In the highest number of categories the number of people drink tap water without boiling it is:
(a) about half of the house holds
(b) all the house holds
(c) nearly three fourths of the households
(d) one fourth of the households
98. During rainy season, drinking water should be:
(a) cleaned
(b) sanitised
(c) stored
(d) used
99. There is a high level of _____ to boiling water.
(a) interest
(b) indifference
(c) care
(d) curiosity
100. According to the passage, un-boiled tap water contains _____.
(a) impurities
(b) chemicals
(c) germs
(d) waste matter

ANSWER SHEET

- | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 51. (a) | 52. (c) | 53. (b) | 54. (b) | 55. (a) | 56. (c) | 57. (b) | 58. (b) | 59. (a) | 60. (b) |
| 61. (b) | 62. (d) | 63. (b) | 64. (c) | 65. (a) | 66. (c) | 67. (c) | 68. (b) | 69. (d) | 70. (a) |
| 71. (d) | 72. (b) | 73. (b) | 74. (c) | 75. (a) | 76. (c) | 77. (c) | 78. (b) | 79. (d) | 80. (b) |
| 81. (d) | 82. (d) | 83. (b) | 84. (b) | 85. (b) | 86. (c) | 87. (a) | 88. (c) | 89. (b) | 90. (a) |
| 91. (a) | 92. (b) | 93. (a) | 94. (c) | 95. (d) | 96. (a) | 97. (c) | 98. (b) | 99. (b) | 100. (c) |
| 101. (a) | 102. (b) | 103. (c) | 104. (a) | 105. (a) | 106. (c) | 107. (b) | 108. (c) | 109. (b) | 110. (c) |

PART-III**NUMERICAL APTITUDE**

101. A sailor goes 12 km downstream in 48 minutes and returns in 1 hour 20 minutes. The speed of the sailor in still water is:
 (a) 12 km/hr (b) 12.5 km/hr
 (c) 13 km/hr (d) 15 km/hr
102. If 24-carat gold is considered to be hundred per cent pure gold, then the percentage of pure gold in 22-carat gold is:
 (a) $91\frac{3}{4}$ (b) $91\frac{2}{3}$
 (c) $91\frac{1}{3}$ (d) $90\frac{2}{3}$
103. If $x + \frac{1}{x} = 3$, then the value of $\frac{x^3 + \frac{1}{3}}{x^2 - x + 1}$ is
 (a) $\frac{3}{2}$ (b) $\frac{5}{2}$
 (c) $\frac{7}{2}$ (d) $\frac{11}{2}$
104. $\left[\left\{ \left(-\frac{1}{2} \right)^2 \right\}^{-2} \right]^{-1}$ is equal to:
 (a) $\frac{1}{16}$ (b) 16
 (c) $-\frac{1}{16}$ (d) -16
105. The price of sugar is increased by 25%. If a family wants to keep its expenses on sugar unaltered, then the family will have to reduce the consumption of sugar by:
 (a) 20% (b) 21%
 (c) 22% (d) 25%
106. A sum of money amount to Rs. 850 in 3 years and to Rs. 925 in 4 years at some rate of simple interest. The sum is:
 (a) Rs. 550 (b) Rs. 600
 (c) Rs. 625 (d) Rs. 700
107. Pipe A can fill a cistern in 6 hours and pipe B can fill it in 8 hours. Both the pipes are opened simultaneously, but after two hours, pipe A is closed. How many hours will B be closed. How many hours will B take to fill the remaining part of the cistern?
 (a) 2
 (b) $3\frac{1}{3}$
 (c) $2\frac{2}{3}$
 (d) 4
108. The sides of a triangle are in the ratio $\frac{1}{3} : \frac{1}{4} : \frac{1}{5}$ and its perimeter is 94 cm. The length of the smallest side of the triangle is:
 (a) 18 cm
 (b) 22.5 cm
 (c) 24 cm
 (d) 27 cm
109. The average of seven consecutive positive integers is 26. The smallest of these integers is:
 (a) 21 (b) 23
 (c) 25 (d) 26
110. Due to an increase of 50% in the price of eggs, 4 eggs less are available for Rs. 24. The present rate of eggs per dozen is:
 (a) Rs. 24
 (b) Rs. 27
 (c) Rs. 36
 (d) Rs. 42
111. Next number of the sequence 2, 9, 28, 65, 126, _____ is :
 (a) 195 (b) 199
 (c) 208 (d) 217

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112. If A's income is 20% more than that of B, by how much percent is B's income less than that of A?
- (a) $16\frac{4}{5}$ (b) $16\frac{1}{3}$
- (c) $16\frac{2}{3}$ (d) $16\frac{2}{7}$
113. X alone can complete a piece of work in 40 days. He worked for 8 days and left. Y alone completed the remaining work in 16 days. How long would X and Y together take to complete the work?
- (a) $13\frac{1}{3}$ days (b) 14 days
- (c) 15 days (d) $16\frac{2}{3}$
114. Which of the following successive discount series is the best of all for a customer?
- (a) 30%, 20%, 10%
 (b) 25%, 20%, 15%
 (c) 30%, 10%, 15%
 (d) 25%, 15%, 10%
115. What price should a shopkeeper mark on an article costing him Rs. 200 to gain 35% after allowing a discount of 25% ?
- (a) Rs. 270 (b) Rs. 300
 (c) Rs. 330 (d) Rs. 360
116. Total weekly emoluments of the workers of a factory is Rs. 1534. Average weekly emolument of a worker is Rs. 118. The number of workers in the factory is:
- (a) 16 (b) 14
 (c) 13 (d) 12
117. The length and breadth of a rectangle are increased by 20% and 25% respectively. The increase in the area of the resulting rectangle will be:
- (a) 60% (b) 50%
 (c) 40% (d) 30%
118. A train travelling with uniform speed crosses two bridges of length 300 m and 240 m in 21 seconds and 18 seconds respectively. The speed of the train is:
- (a) 72 km/hr (b) 68 km/hr
 (c) 65 km/hr (d) 60 km/hr
119. Question Missing
- (a) 395 (b) 135
 (c) 45 (d) 5
120. If $A = \frac{1}{4}B$ and $B = \frac{1}{2}C$, then A : B : C is :
- (a) 8 : 4 : 1
 (b) 4 : 2 : 1
 (c) 1 : 4 : 8 (d) 1 : 2 : 4
121. A 7 m wide road runs outside around a circular park, whose circumference is 176m. The area of the road is:
- (use $\pi = \frac{22}{7}$)
- (a) 1386 m^2 (b) 1472 m^2
 (c) 1512 m^2 (d) 1760 m^2
122. If the cost price and selling price of an article are in the ratio 10 : 11, then the percentage of profit is:
- (a) 10 (b) 9
 (c) 3 (d) 1
123. A shopkeeper sells his goods at 15% discount. The marked price of an article whose selling price is Rs. 629 is:
- (a) Rs. 740 (b) Rs. 704
 (c) Rs. 700 (d) Rs. 614

124. Present population of a village is 67600. It has been increasing annually at the rate of 4%. What was the population of the village two years ago?
- (a) 62500 (b) 63000
(c) 64756 (d) 65200
125. The average age of A and B is 30 years and that of B and C is 26 years. The difference of the age of A and B is:
- (a) 2 years (b) 4 years
(c) 6 years (d) 8 years
126. Twenty women together can complete a work in 16 days. 16 men together can complete the same work in 15 days. The ratio of the working capacity of a man to that of a woman is:
- (a) 3 : 4 (b) 4 : 3
(c) 5 : 3 (d) 4 : 5
127. If $a + \frac{1}{a} + 1 = 0$ ($a \neq 0$) then the value of $(a^4 - a)$ is:
- (a) (b)
(c) 2 (d) -1
128. If the height of a cone is increased by 100% then its volume is increased by:
- (a) 100% (b) 200%
(c) 300% (d) 400%
129. If x is a perfect square integer such that $7 < (2x - 3) < 17$, then the value of x is:
- (a) 25 (b) 16
(c) 9 (d) 4
130. The difference between the simple interest received from two different banks on Rs. 500 for 2 years is Rs. 2.50. The difference between their per annum rates of interest is:
- (a) 0.10% (b) 0.25%
(c) 0.50% (d) 1.00%
131. $999 \frac{998}{999} \times 999$ is equal to:
- (a) 998999 (b) 999899
(c) 989999 (d) 999989
132. The cost price of 24 apples is the same as the selling price of 18 apples. The percentage of gain is:
- (a) $12\frac{1}{2}$ (b) $14\frac{2}{3}$
(c) $16\frac{2}{3}$ (d) $33\frac{1}{3}$
133. A merchant sold an article for Rs. 75 at a profit percent equal to his cost price. The cost price of the article was:
- (a) Rs. 45 (b) Rs. 50
(c) Rs. 54 (d) Rs. 60
134. The largest among the numbers 0.9, $(0.9)^2$, $\sqrt{0.9}$, $0.\bar{9}$ is:
- (a) 0.9 (b) $(0.9)^2$
(c) $\sqrt{0.9}$ (d) $0.\bar{9}$
135. The rain water from a roof $22\text{ m} \times 20\text{ m}$ drains into a cylindrical vessel having a diameter of 2 m and height 3.5 m. If the vessel is just full, then the rainfall in cm is:
- (a) 2 (b) 2.5
(c) 3 (d) 4.5
136. Question Missing
- (a) Rs. 100 (b) Rs. 150
(c) Rs. 175 (d) Rs. 200
137. If n is an integer, then $(n^3 - n)$ is always divisible by:
- (a) 4 (b) 5
(c) 6 (d) 7

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138. A sum of money was lent at simple interest at a certain rate for 3 years. Had it been lent at 2.5% per annum higher rate, it would have fetched Rs. 540 more. The money lent was:
 (a) Rs. 6400 (b) Rs. 6472
 (c) Rs. 6840 (d) Rs. 7200
139. What number should be added to each of 6, 14, 18 and 38 so that the resulting numbers make a proportion?
 (a) 1 (b) 2
 (c) 3 (d) 4
140. $\frac{0.8 \times 0.08 \times 0.08 + 0.02 \times 0.02 \times 0.02}{0.08 \times 0.08 - 0.0016 + 0.02 \times 0.02}$ is simplified to:
 (a) 0.001 (b) 0.1
 (c) 0.0016 (d) 0.016
141. If $x = \sqrt{3} + \sqrt{3}$, then the value of $x^2 + \frac{1}{x^2}$ is:
 (a) 4 (b) 6
 (c) 9 (d) 10
142. The ratio of the number of boys and girls in a school 3 : 2. If 20% of the boys and 25% of the girls are scholarship holders, then the percentage of the students, who do not get the scholarships, is:
 (a) 78 (b) 75
 (c) 60 (d) 55
143. The HCF to two numbers is 15 and their LCM is 255. If one of the numbers is 75, then the others is:
 (a) 105 (b) 90
 (c) 60 (d) 45
144. A pipe of diameter d can drain a certain water tank in 40 minutes. The time taken by a pipe of diameter $2d$ for doing the same job is
 (a) 5 minutes (b) 10 minutes
 (c) 20 minutes (d) 80 minutes
145. In a mixture of 60 litres, the ratio of milk and water is 2 : 1. How much more water must be added to make its ratio 1 : 2 ?
 (a) 40 liters (b) 52 liters
 (c) 54 liters (d) 60 liters
146. The area of an equilateral triangle is $4\sqrt{3} \text{ cm}^2$. The length of each side of the triangle is:
 (a) 3 cm (b) $2\sqrt{2} \text{ cm}$
 (c) $2\sqrt{3} \text{ cm}$ (d) 4 cm
- Directions (147-150):** The pie-chart, given here, shows various expenses of a publisher in the production and sale of a book. Study the chart and answer questions based on it.
-
- The pie chart illustrates the distribution of expenses for a book's production and sale. The largest portion is Printing cost at 35%, followed by Binding charges and Advertisement charges at 18% each. Royalty accounts for 15%, Paper cost for 10%, and Miscellaneous expenses for 4%.
147. If the printing cost is Rs. 17,500, the 'Royalty' paid is:
 (a) Rs. 8,750 (b) Rs. 7,500
 (c) Rs. 6,300 (d) Rs. 3,130
148. The measure of central angle for the section 'printing cost' is:
 (a) 126° (b) 70°
 (c) 63° (d) 35°

149. Miscellaneous expenses are what percent of paper cost?
- (a) 4 (b) 10
(c) 40 (d) 44
150. The difference between the measures of central angles of sectors for bidding charges and advertisement charges is:
- (a) 180° (b) 90°
(c) 18° (d) 0°

ANSWER SHEET

- | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 101. (a) | 102. (b) | 103. (c) | 104. (a) | 105. (a) | 106. (c) | 107. (b) | 108. (c) | 109. (b) | 110. (c) |
| 111. (d) | 112. (c) | 113. (a) | 114. (a) | 115. (d) | 116. (c) | 117. (b) | 118. (a) | 119. (a) | 120. (c) |
| 121. (a) | 122. (a) | 123. (a) | 124. (a) | 125. (d) | 126. (b) | 127. (a) | 128. (a) | 129. (c) | 130. (b) |
| 131. (a) | 132. (d) | 133. (b) | 134. (d) | 135. (b) | 136. (b) | 137. (c) | 138. (d) | 139. (b) | 140. (b) |
| 141. (b) | 142. (a) | 143. (d) | 144. (a) | 145. (d) | 146. (d) | 147. (b) | 148. (a) | 149. (c) | 150. (d) |

PART-IV**GENERAL AWARENESS**

151. The unit of ionic product of water (K_w) is:
 (a) $\text{Mol}^2 \text{let}^{-1}$ (b) $\text{Mol}^2 \text{let}^{-2}$
 (c) $\text{Mol}^{-1} \text{let}^{-2}$ (d) $\text{Mol}^{-1} \text{let}^{-1}$
152. What is the name of the Fort build by the English in Calcutta?
 (a) Fort St. David
 (b) Fort St. Andrew
 (c) Fort William
 (d) Fort Victoria
153. National Income include:
 (a) Financial help to earthquake victims
 (b) Pocket money of a child
 (c) Winning of a lottery prize
 (d) Construction of a new house
154. There is a need to keep larger area under forests for:
 (a) absorption of carbon dioxide
 (b) protecting wildlife
 (c) raising precipitation
 (d) geological balance
155. The Shipra path Police Station that has been adjudged the best in the word is in:
 (a) New Delhi (b) Jaipur
 (c) Chandigarh (d) Mumbai
156. Who amongst the following was the Last Guru of the Sikhs?
 (a) Guru Arjun Dev'
 (b) Guru Teg Bahadur
 (c) Guru Gobind Singh
 (d) Guru Angad Dav
157. C.R. Das and Motilal Nehru formed the 'Swaraj Party' after,
 (a) Swadeshi Movement
 (b) Non Cooperation Movement
 (c) Civil Disobedience Movement
 (d) Quit India Movement
158. The situation on which total Revenues equals total cost, is known as:
 (a) Monopolistic competition
 (b) Equilibrium level of output
 (c) Break even point
 (d) Perfect competition
159. When two cubes of ice are pressed on each other, what is the cause of their being one ?
 (a) Van Der Waals Force
 (b) Dipole moment
 (c) Hydrogen bond formation
 (d) Covalent attraction
160. When milk is churned, the cream separates from it due to:
 (a) Frictional force
 (b) Centrifugal force
 (c) Gravitational force
 (d) Viscous forces
161. Moving electric charge produces:
 (a) magnetic field
 (b) sound waves
 (c) light rays
 (d) heat waves

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162. The crop which occupies maximum cultivated area in India is:
(a) Rice (b) Wheat
(c) Gram (d) Linseed
163. The S.I. unit of electric charge is:
(a) ampere (b) coulomb
(c) e.s.u (d) Kelvin
164. Demand curve of a firm under perfect competition is:
(a) horizontal to ox-axis
(b) negatively sloped
(c) positively sloped
(d) U-shaped
165. Who was the Chola king who brought Ganga from North to South?
(a) Raja Raja Chola
(b) Mahendra
(c) Rajendra Chola
(d) Parantaka
166. The writ of 'Habeas Corpus' is issued in the event of:
(a) Loss of Property
(b) Refund of Excess Taxes
(c) Wrongful Police detention
(d) Violation of the freedom of speech
167. Light beam which is highly directional is called:
(a) eraser (b) grazer
(c) maser (d) laser
168. The most abundant constituent of atmospheric air is:
(a) carbon (b) hydrogen
(c) oxygen (d) nitrogen
169. Which is the administrative capital of Malaysia?
(a) Putrajaya (b) Seremban
(c) Taiping (d) Ipoh
170. Fiber diet includes:
(a) glycogen (b) proteins
(c) cellulose (d) fats
171. Tuberculosis infection is by means of:
(a) Mycobacterium avium
(b) Staphylococcus
(c) Mycobacterium tuberculosis
(d) Streptococcus
172. How many agro-climatic zones are there in India as far as the official categorization of the Ministry of Agriculture is concerned?
(a) 123 (b) 126
(c) 127 (d) 122
173. The world's wettest continent is:
(a) Asia (b) Europe
(c) North America (d) South America
174. Dumping of solid waste in low-lying areas without earth cover is called as:
(a) Sanitary landfilling
(b) Open dumping
(c) Compositing
(d) Incineration
175. Permissible noise level at Residential area during night time is:
(a) 45 dB (A)
(b) 55 dB (A)
(c) 75 dB (A) (d) 80 dB (A)
176. The author of the Book Title 'The Future of India', is:
(a) Bimal Jalan
(b) Depak Chopra
(c) Amitav Ghosh
(d) N.K. Singh

177. The expenditure made on which of the following does not require budgetary approval every year in India?
- (a) Defence
 - (b) Natural calamities
 - (c) Consolidated fund
 - (d) Contingency fund
178. The Baisakhi Festival of the year 1999 is of great historical significance to Punjab because
- (a) it commemorates the tercentenary of the foundation of Khalsa Panth
 - (b) it being the last such festival of the twentieth century
 - (c) of participation by a large number of Punjabis who are non resident Indians
 - (d) None of the above
179. The abnormal constituent of urine is
- (a) urea
 - (b) creatinine
 - (c) albumin
 - (d) sodium
180. Value of output and value added can be distinguished if we know:
- (a) the value of intermediate consumption
 - (b) the value of net indirect taxes
 - (c) the value of the sales
 - (d) the value of consumption of fixed capital
181. The disease that is caused by virus is:
- (a) Typhoid
 - (b) Cholera
 - (c) Common cold
 - (d) Malaria
182. The 3rd Commonwealth Youth Games were held at:
- (a) Pune
 - (b) Karachi
 - (c) Dhaka
 - (d) London
183. The term 'PC-XT' refers to—.
- (a) Personal Computer External Technology
 - (b) Personal Computer Extended Technology
 - (c) Personal Computer Expanded Technology
 - (d) Personal Computer Embedded Technology
184. Transfer payments include:
- (a) Gifts received from a friend
 - (b) rent free accommodation by the employer
 - (c) net factor income from abroad
 - (d) employee's contribution to social security
185. The marginal revenue of a monopolist is:
- (a) more than price
 - (b) equal to price
 - (c) less than price
 - (d) less than marginal cost
186. The most important element of weather affecting agriculture in India is:
- (a) Temperature
 - (b) Humidity
 - (c) Wind
 - (d) Rainfall
187. What was Chandragupta II also known as?
- (a) Samudra Gupta
 - (b) Skanda Gupta
 - (c) Vikramaditya
 - (d) Ranaa Gupta
188. October 2nd of every year has been declared by UNO as:
- (a) International Non-violence day
 - (b) International heritage day
 - (c) International Moral Values day
 - (d) International anti-terrorism day

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189. In plants water is absorbed by the root hairs by a process called:
(a) Transpiration
(b) Respiration
(c) Perspiration
(d) Osmosis
190. The element which is required by the plant in large quantity:
(a) Calcium (b) Nitrogen
(c) Phosphorus (d) Sulphur
191. Which of the following gods are worshipped in the sanctum of Badrinath and Kedarnath temples respectively?
(a) Visnu and Shiva
(b) Shiva and Vishnu
(c) Shiva and Parvati
(d) Vishnu and Brahma
192. Which one of the following ocean currents does not occur in Atlantic Ocean?
(a) Gulf stream
(b) Brazil current
(c) Peru current
(d) Canary current
193. Who was the Chairman of the Drafting Committee of the Constituent Assembly?
(a) Dr. B. R. Ambedkar
(b) C. Rajagopalachari
(c) Dr. Rajendra Prasad
(d) Jawaharlal Nehru
194. Energy in reflected light:
(a) does not depends on the angle of incidence
(b) increases with the increase in angle
(c) decreases with the increase in angle of incidence
(d) becomes maximum for angle of incidence equal to 45°
195. Which gas is used for converting vegetable oils into saturated fats?
(a) H_2 (b) O_2
(c) Cl_2 (d) SO_2
196. Which one of the following gives energy to our body?
(a) Vitamins (b) Water
(c) Carbohydrates
(d) Proteins
197. Which of the following pairs has open type of circulatory system?
(a) Earthworm and Leech
(b) Man and Whale
(c) Cockroach and Silverfish
(d) Tadpole larva and Fish
198. Chemical name of bleaching powder is:
(a) Calcium chlorate
(b) Calcium hypochlorite
(c) Calcium chloro hypochlorite
(d) Calcium bi chloride
199. When were the Fundamental Duties of the Indian citizen incorporated in the constitution?
(a) 1952 (b) 1976
(c) 1979 (d) 1981
200. Alcoholic ($-OH$) group can be identified by:
(a) Tollen's Reagent Test
(b) Esterfication Test
(c) $FeCl_3$ Test
(d) Ozonolysis Reaction

ANSWER SHEET

151 (b)	152 (c)	153 (d)	154 (a)	155 (b)	156 (c)	157 (b)	158 (c)	159 (d)	160 (b)
161 (a)	162 (a)	163 (b)	164 (a)	165 (c)	166 (c)	167 (d)	168 (d)	169 (a)	170 (c)
171 (c)	172 (b)	173 (b)	174 (a)	175 (a)	176 (a)	177 (b)	178 (a)	179 (c)	180 (b)
181 (c)	182 (a)	183 (c)	184 (c)	185 (c)	186 (d)	187 (c)	188 (a)	189 (d)	190 (b)
191 (a)	192 (c)	193 (a)	194 (a)	195 (a)	196 (c)	197 (c)	198 (d)	199 (b)	200 (c)