

Questions : 50

Time: 60 Minutes

There are 3 sections, 20 questions in Section-1, 20 questions in Section-2, 10 questions in Section-3

SET A

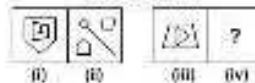
Section-1 - Logical Reasoning

1. Read the following information to answer the given question:
- (i) Eight persons F, E, G, H, I, J, K and L are seated around a square table-two on each side.
 - (ii) There are three female members and they are not seated next to each other.
 - (iii) J is between L and F.
 - (iv) G is between I and E.
 - (v) H, a female member, is second to the left of J.
 - (vi) E, a male member, is seated opposite to F, a female member.
 - (vii) There is a female member between F and I.
- Who among the following are the three female members?
- (A) E, H and G (B) E, G and J (C) G, H and J (D) None of these

2. If FORGE is written as FPTJI, how will CULPRIT be written?
- (A) CSJNPGR (B) CVMQSTU (C) CVNSVNZ (D) CXOSULW

3. The given question consists of two sets of figures. Figures (i), (ii), (iii) and (iv) constitute the Problem set. There is a definite relationship between figure (i) and (ii). Establish a similar relationship between figure (iii) and (iv) by selecting a suitable figure from the options that would replace (?) in figure (iv).

Problem Set



4. In the given question there are four figure (A), (B), (C) and (D). Out of these four figures, three are similar in a certain way. However, one figure is not like the other three. Choose the figure which is different from the rest.



5. If '+' means 'x', 'x' means '-', '-' means '+' and '=' means '÷' then what is the value of given below statement?

$$38 + 19 - 10 = 17 + 3$$

- (A) 18 (B) 17 (C) 16 (D) 12



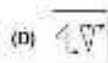
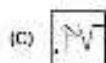
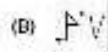
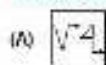
6. Five boys participated in an education competition.

- (i) Arsh ranked higher than Samay. (ii) Samay ranked higher than Pratik.
 (iii) Arsh ranked lower than Nikhil. (iv) Kabir ranked between Arsh and Samay.

Who ranked the highest?

- (A) Nikhil (B) Arsh (C) Samay (D) Kabir

7. Find out from the options which is the mirror-image of the Fig.(X) if mirror is placed along MR.



8. Which number comes next in the given series?

5, 9, 17, 29, 49, (?)

- (A) 65 (B) 50 (C) 70 (D) 60

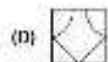
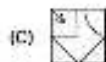
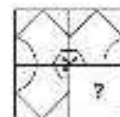
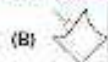
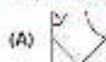
9. Gautam has to cross seven lanes to reach his school. He finds that Yellow lane is between his house and Cama lane. Apple street is third from his school. Petrol lane is third from the house. He has to cross Ash lane last. Cama lane is between Yellow lane and Petrol lanes. Rao street is sixth from his house. Which lane is between Park lane and Rao Street?

- (A) Yellow lane (B) Cama lane (C) Apple street (D) Petrol lane

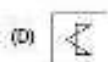
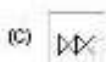
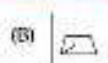
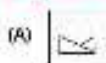
10. If the English alphabet is written in reverse order and then every alternate letter starting from Y, is deleted, then which letter will be exactly in the middle?

- (A) M (B) O (C) N (D) M or O

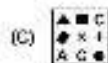
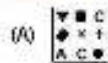
11. Find the figure from the options which completes the Fig.(X).



12. Find the figure from the options in which Fig.(X) is embedded as its part.



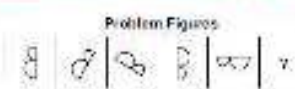
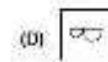
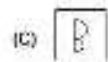
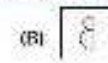
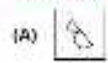
13. Which of these options is same as that of Fig.(X)?



14. Starting from the point X, Jayant walked 15 m towards West. He turned left and walked 20 m. He then turned left and walked 15 m. After this he turned to his right and walked 12 m. How far and in which direction is now Jayant from point X?

- (A) 32 m, South (B) 47 m, East (C) 42 m, North (D) 27 m, South

15. Find the figure from the options which will continue the series established by problem figures.



16. Find which one word can be made from the letters of the given word.

CHROMATOGRAPHIC

- (A) STORE (B) ROAST (C) MOTOR (D) GRAPHS

17. If 'cuckoo' is called 'parrot', 'parrot' is called 'blackbird', 'blackbird' is called 'stork', 'stork' is called 'crow', 'crow' is called 'heron', 'heron' is called 'gander'; then what is the name of green bird?

- (A) Parrot (B) Blackbird (C) Heron (D) Gander

18. If all the numbers are arranged in descending order on the basis of the sum of all the three digits of each group, then which group of the numbers will be just in the middle?

123, 345, 567, 789, 914, 234, 456

- (A) 734 (B) 567 (C) 345 (D) 914

19. Some letters are given which are numbered 1, 2, 3, 4 and 5. Below are given four options containing combinations of these numbers. Find that combination of numbers so that letters arranged accordingly form a meaningful word.

C H A T W
1 2 3 4 5

- (A) 2, 3, 4, 5, 1 (B) 5, 3, 2, 4, 1 (C) 1, 3, 2, 4, 5 (D) 5, 3, 4, 1, 2

20. Which number will replace the question mark?

- (A) 30 (B) 13
(C) 20 (D) 118



21. Neha is getting ready for the state assessment, and is planning mini-lessons for students focused on particular difficulties that they are having with adding columns of numbers. To target her instruction more effectively, she wants to work with groups of students who are making the same kind of error, so she looks at a recent quiz to see what they tend to do. She sees the following three student mistakes.

Which have the same kind of error?

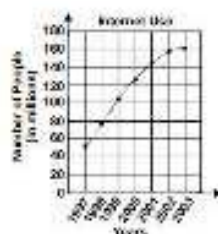
- (A) I and II (B) I and III
(C) II and III (D) I, II and III

$$\begin{array}{r} \text{(I)} \quad \begin{array}{r} 38 \\ 49 \\ + 65 \\ \hline 142 \end{array} \quad \text{(II)} \quad \begin{array}{r} 45 \\ 37 \\ + 29 \\ \hline 101 \end{array} \quad \text{(III)} \quad \begin{array}{r} 32 \\ 14 \\ + 19 \\ \hline 64 \end{array}$$

22. This graph shows the number of people who use the Internet each year in India from 1997 to 2003.

Based on the information in the graph, between which two years did the smallest increase occur?

- (A) 1998 and 1999
(B) 2001 and 2002
(C) 2002 and 2003
(D) 1997 and 1998



23. Which of the following represents the fraction of Figure X that is shaded?

- (A) $\frac{1}{2}$ (B) $\frac{2}{3}$
(C) $\frac{4}{5}$ (D) $\frac{5}{9}$

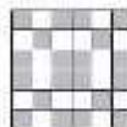


Figure X

24. Raghu drew the line segments shown here on a piece of paper.

Which of the following pairs of line segments appears to be perpendicular?

- (A) \overline{GH} and \overline{KL} (B) \overline{GH} and \overline{IJ}
(C) \overline{EF} and \overline{KL} (D) \overline{EF} and \overline{GH}



25. Which of the following three-dimensional shapes has 1 rectangular face and 4 triangular faces?

- (A) Rectangular pyramid (B) Triangular pyramid (C) Rectangular prism (D) Triangular prism

26. Siddharth is ordering these decimals: 0.40, 0.350, 0.200, 0.03.

Which number line shows these decimals in the correct order? (Number lines are not drawn to scale.)

- (A) (B)
(C) (D)

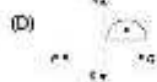
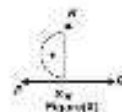
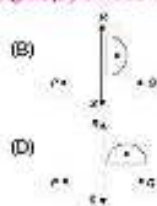
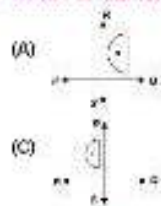
27. Represent the following expression algebraically.

A number, x , decreased by the sum of $2x$ and 5 .

- (A) $(2x + 5) - x$ (B) $x - (2x + 5)$ (C) $x - 2x + 5$ (D) $(x + 2x) - 5$

28. A prime number can best be described as _____
- (A) A number with exactly 2 factors. (B) Always an odd number
(C) A number with more than 2 different factors. (D) Always an even number

29. Which of the following shows a reflection of the figure(X) across the RS ?



30. A hot air balloon was 150 feet in the air. The distances it moved down and up, in feet, are shown in this list.

$$\{-40, 100, -80\}$$

How high in the air is the hot air balloon after moving these distances?

- (A) -420 feet. (B) -100 feet (C) 100 feet. (D) 420 feet
31. Evaluate: $12\frac{1}{3} - 9\frac{3}{5} + 8.4 + 11.02$
- (A) 01.03 (B) 420.73 (C) 422.73 (D) 42.273

32. Find the area of the given figure. (Figure not drawn to scale)

- (A) 12.5 cm²
(B) 42.5 cm²
(C) 32.5 cm²
(D) 10 cm²



33. Which word describes the boxed number?

$$\boxed{8}x = y$$

- (A) Coefficient (B) Equation (C) Term (D) Variable

34. Fill in the blank :

A number for which sum of all its factors is equal to _____ the number is called perfect number.

- (A) Twice (B) Thrice (C) Four times (D) Square

35. Solve the following Roman numerals.

$$LIX - XXXVI + IX + XC - LX$$

- (A) CXXXVI (B) CXXXIV (C) CXXVII (D) CXXXIV

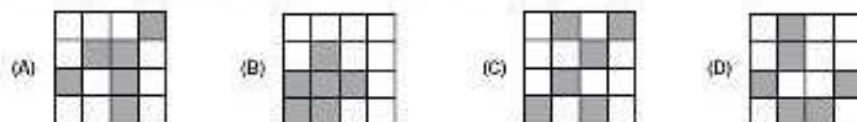
36. Find the lowest natural number which when divided by 112, 140 and 150 leaves a remainder 0 in each case.

- (A) 1440 (B) 1688 (C) 720 (D) 1672



37. By joining any two points on the circumference of a circle, we obtain a _____.
- (A) Diameter (B) Chord (C) Radius (D) Circumference

38. Which of the following shows a symmetric figure?



39. Which of the following fractions is smaller than $\frac{5}{9}$?

- (A) $\frac{1}{4}$ (B) $\frac{11}{13}$ (C) $\frac{5}{7}$ (D) $\frac{6}{7}$

40. Express 12 sec as a percentage of 3 mins 20 sec.

- (A) 6% (B) 3.75% (C) 60% (D) 37.5%

Section-3 – Everyday Mathematics

41. At the store, Mini paid ₹ 0.74 for seven oranges. At this rate, how much will she pay for 24 oranges?

- (A) ₹ 27.84 (B) ₹ 28.86 (C) ₹ 19.86 (D) ₹ 24.38

42. Students are decorating a rectangular bulletin board that measures $8\frac{1}{4}$ m by $4\frac{2}{3}$ m. What is the area of the bulletin board, in square metres?

- (A) $25\frac{5}{6}$ sq. m (B) $30\frac{1}{3}$ sq. m (C) $32\frac{1}{6}$ sq. m (D) $36\frac{1}{2}$ sq. m

43. A little more than 75% of the students in Mr. Ayaan's sixth-grade class raised money for the 'Save the Rain Forest' project. There are 32 students in Mr. Ayaan's class. About how many students raised the money?

- (A) 26 (B) 23 (C) 32 (D) 43

44. At the beginning of the month, Latika had a balance of ₹ 22500 in her bank account. During the month she made deposits of ₹ 18250 and ₹ 27390. She withdrew ₹ 898, ₹ 1120 and ₹ 18295 to clear her bills. What was the new balance in her bank account at the end of the month?

- (A) ₹ 12345 (B) ₹ 50659 (C) ₹ 47007 (D) ₹ 47907

45. A grocery store sign indicates that 6 bananas are for ₹ 35.00, and a sign indicates that 5 oranges are for ₹ 58.70. Find the total cost of buying 2 bananas and 2 oranges.

- (A) ₹ 28.95 (B) ₹ 12.04 (C) ₹ 35.3 (D) ₹ 18.5



46. Divya and Megha collected newspapers for recycling. Divya collected $5\frac{3}{7}$ grams of newspaper. Megha collected $2\frac{1}{4}$ grams of newspaper. What was the total amount of newspaper they collected?
- (A) 8 grams (B) $6\frac{1}{2}$ grams (C) $7\frac{19}{28}$ grams (D) $7\frac{10}{28}$ grams
-
47. Rohan, Amit and Kartik walk around a circular path. Their steps measure 24 cm, 30 cm and 36 cm respectively. How much distance will they cover from the starting point so that they meet again?
- (A) 360 cm (B) 400 cm (C) 360 cm (D) 350 cm
48. A tin of oil was $\frac{4}{5}$ full. When six bottles of oil were taken out and four bottles of oil were poured into it, it was $\frac{3}{4}$ full. How many bottles of oil can the tin contain?
- (A) 40 (B) 30 (C) 70 (D) 80
-
49. How many students in a class of size 10 m by 5 m can be made to sit, if each student occupies 1.2 sq metres of floor area?
- (A) 50 (B) 60 (C) 30 (D) 40
-
50. A book of 1,486 pages has 9,95,804 words in it. The number of words in each page is _____.
- (A) 504 (B) 604 (C) 675 (D) 595

