



School Level Examination
SLE 2023

GRADE
6

MATHEMATICS

Subject Code:

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Total Questions: 40

Time: 1 hour

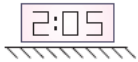
DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED TO DO SO

- All questions are compulsory.
- Read the instructions on the **ANSWER SHEET** and fill in your **NAME, CLASS** and **OTHER INFORMATION**.
- To mark your choice of answer by darkening the circles in the **ANSWER SHEET**, use a **BLUE/BLACK BALLPEN** only.
- You **MUST** record your answers on the **ANSWER SHEET** only.
- There are **40 MULTIPLE CHOICE QUESTIONS**. Use the information provided to choose the **BEST** possible answer among the four options. On your **ANSWER SHEET** fill in the circle that matches your answer.
- Marks are **NOT** deducted for incorrect answers.
- Return the **ANSWER SHEET** to the invigilator at the end of the examination.
- You are **NOT** allowed to use a calculator. You may use a ruler and spare paper for rough work.

This question paper contains a total of 40 questions divided into three sections - A, B and C.
Read the instructions carefully before attempting these questions.

Section A (Logical Reasoning)

1. Select the correct mirror image of the give figure.



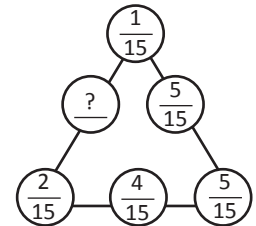
- (A) 5:02 (B) 20:5
(C) 50:2 (D) 5:50

2. Ankit, Tarun, Roshni and Sona are friends. They play cards. Partners face in opposite directions. Ankit and Tarun become partners. Sona faces North. If Ankit faces towards West, then who faces towards South?

- (A) Tarun (B) Roshni
(C) Sona (D) Data inadequate

3. What should be placed in the empty circle so that the sum of the fractions on each side of the triangle is same?

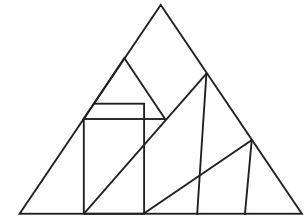
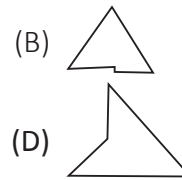
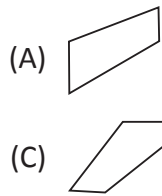
- (A) $\frac{6}{15}$ (B) $\frac{7}{15}$
(C) $\frac{4}{15}$ (D) $\frac{8}{15}$



4. In a certain code, if ONE can be written as 213 and TWO as 452, then TEN can be written as _____ .

- (A) 341 (B) 413
(C) 432 (D) 431

5. Select the figure from the options that is NOT exactly embedded as one of the parts in the given figure.



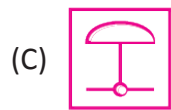
6. Find the mirror image of figure x, if mirror is placed vertically to the left.



7. The sum of the ages of a father and his son is 57 years. The difference in their ages two years ago was 27 years. How old is the father now?
 (A) 34 years (B) 42 years
 (C) 38 years (D) 40 years
8. Which of the following figures in the given options is embedded in figure x?



figure x

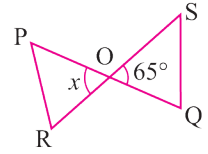


Section B (Subject Specific)

9. Which of the following is the predecessor of 1 in natural numbers?
 (A) 0 (B) 2
 (C) -1 (D) None of these
10. When a number (N) is divided by divisor (D), quotient Q and remainder R, then they are connected by the relation.
 (A) $N = D \times Q + R$ (B) $D = Q \times N + R$
 (C) $Q = N \times D + R$ (D) $N = D \times Q - R$
11. Which of the following properties can NOT be used for division of whole numbers?
 (A) Closure property (B) Commutative property
 (C) Associative property (D) All of these
12. A boy saves ₹4.65 daily. The least number of days in which he can save an exact number of rupees (without decimal) is _____.
 (A) 12 (B) 16
 (C) 18 (D) 20
13. The product of a whole number (other than zero) and its successor is always _____.
 (A) an even number (B) an odd number
 (C) divisible by 4 (D) divisible by 3
14. Shivani reads $\frac{3}{5}$ of a book. She still needs to read 80 pages to complete the book. Total number of pages in the book is _____.
 (A) 100 (B) 200
 (C) 300 (D) 400

15. The sum of two integers is 48. If one of the integer is -24, what will be the other integer?
 (A) 62 (B) 72
 (C) 50 (D) None of these

16. In the given figure, line segments PQ and RS intersect at the point O. Find the measure of $\angle POR$.
 (A) 65° (B) 90°
 (C) 115° (D) None of these



17. _____ is/are the angle/s whose sum measures 90° .
 (A) Complementary angles (B) Supplementary angles
 (C) Zero angle (D) Straight angle

18. Match the Column I and Column II.

Column I	Column II
(i) 100 crores	(P) 1 thousand
(ii) 10 lakhs	(Q) 1 lakh
(iii) 100 thousands	(R) 1 billion
(iv) 100 tens	(S) 1 million

- (A) (i)→(P), (ii)→(Q), (iii)→(S), (iv)→(R) (B) (i)→(R), (ii)→(S), (iii)→(P), (iv)→(Q)
 (C) (i)→(R), (ii)→(S), (iii)→(Q), (iv)→(P) (D) (i)→(P), (ii)→(S), (iii)→(Q), (iv)→(R)
19. Which of the following values of the variable in the given equation solves the equation correctly?
 $10x - 7 = 23$
 (A) 2 (B) 3
 (C) 4 (D) 5

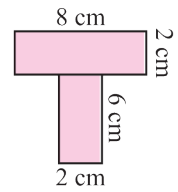
20. The given figure shows the number line. The number represented by x is _____.



- (A) 0.74 (B) 0.76
 (C) 0.78 (D) 0.79
21. Write an expression for the given statement: "Length of the rectangle is 4 times greater than twice of the breadth."
 (A) $2b/4 = l$ (B) $2b - 4 = l$
 (C) $l = (2b) \times 4$ (D) $2b + 4 = l$

22. The area of the adjoining figure is _____.

- (A) 22 cm² (B) 14 cm²
(C) 18 cm² (D) 28 cm²



23. A regular hexagon has _____ sides and _____ diagonals.

- (A) 6, 9 (B) 6, 6
(C) 6, 3 (D) 5, 6

24. Find the value of p, based on the data given below:

$$\frac{2}{3}p - 2\frac{1}{2} = 3\frac{1}{2}$$

- (A) 6 (B) -9
(C) 9 (D) -3

25. In a quiz, each student was required to answer 20 questions. 2 marks were given for every correct answer and 1 mark was deducted for every wrong answer. Vaibhav answered 17 questions correctly and Sanvi answered 12 questions correctly. Find the difference in the total marks obtained by them if they both attempted all the questions?

- (A) 13 (B) 14
(C) 15 (D) 16

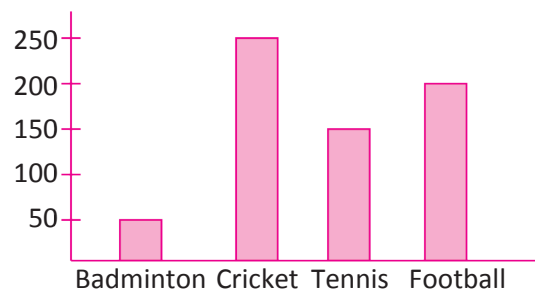
26. Yellow paint and blue paint are mixed to get green paint. The ratio of the volume of the yellow paint to the volume of the blue paint is 5 : 3. If the difference in volumes of the two paints is 500 ml, then what is the volume of the green paint?

- (A) 1 L (B) 1.5 L
(C) 2 L (D) 2.25 L

27. A rectangle has a perimeter of 84 cm. Its length is 6 cm longer than its breadth. Find the measure of its length.

- (A) 18 cm (B) 20 cm
(C) 21 cm (D) 24 cm

28. The given graph shows the sports played by the students of a school. How many more students play Football than Badminton?



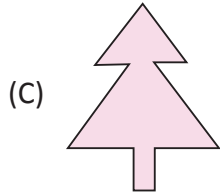
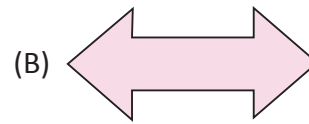
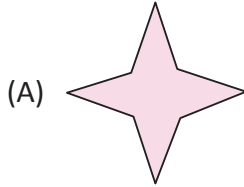
- (A) 20 (B) 100
(C) 500 (D) 150

Instruction: Q. 29 to 33 are two-key based questions having four options A, B, C and D out of which TWO are correct.

29. Angles can be constructed using either protractor or ruler and compasses. Choose the angles among the following which can be constructed using a pair of compasses and ruler:

- (A) 30° (B) 85°
(C) 110° (D) 135°

30. Which of the following figures have only two lines of symmetry?



31. Hema is 53 years old and her daughter's age is 13 years at present. Find the ratio of the mother's age to that of her daughter when the daughter was 8 years old. Also find the ratio of their ages 3 years after their present ages.

- (A) $13/53$ (B) $6/1$
(C) $7/2$ (D) $3/2$

32. One integer is greater than the other by +12. If one number is -23 , then the other can be _____ or _____.

- (A) 35 (B) -35
(C) -11 (D) 11

33. How many tiles with length and breadth 4 feet and 2 feet respectively will be needed for the flooring of a rectangular hall whose length and breadth are 64 feet and 8 feet? Find the perimeter of the given hall.

- (A) 74 (B) 64
(C) 12 feet (D) 144 feet

Section C (Competency Enhancement)

34. If Dhruv's flat is at floor no. 23. He uses the stairs to reach his floor from the floor no. 4 and covers 11 floors in 2 minutes, then how many floors are still left to be covered to reach home?

- (A) 6 (B) 7
(C) 8 (D) 9

35. Sona has a hobby of collecting coins. The number of 25 paise coins is five times the number of 50 paise coins. There are 120 coins in her collection. What is the amount collected by Sona?
- (A) ₹35 (B) ₹37
(C) ₹40.75 (D) ₹40.50

Study the given text and answer question 36.

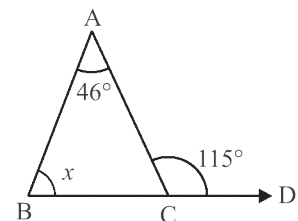
A natural number is called a prime number if it has no factor other than 1 and the number itself, and a natural number is called a composite number if it has at least one more factor other than 1 and the number itself.

36. The difference between the number of primes less than 50, and the number of primes which are greater than 50 but less than 100 is _____.
- (A) 2 (B) 3
(C) 4 (D) 5

37. Consider the collection of figures below. How many figures in the image have exactly one line of symmetry?



- (A) 2 (B) 3
(C) 4 (D) 6
38. The population of a town was 65,673. In a year, it increased by 4,356 due to new births and people who moved in the town. However, 8,241 people died or left the town during the year. What was the population at the end of the year?
- (A) 61,780 (B) 61,788
(C) 61,870 (D) 61,875
39. The number of two digit prime numbers ending with 1 at units place is _____.
- (A) 3 (B) 4
(C) 5 (D) 6
40. In the adjoining figure, angle x equals _____.



- (A) 48° (B) 69°
(C) 75° (D) 72°

