# S I M S®

(SCHOLARS INTEGRAL MATHS & SCIENCE OLYMPIADS)

CLASS VII

**BIGGEST NATIONAL LEVEL OLYMPIADS (STAGE - II) : 2025-26**

**MAX. MARKS : 90** | **SIMO QUESTION PAPER** | **TIME: 60 MIN.**

NAME OF THE STUDENT : .....

HALL TICKET NUMBER : .....

NAME OF THE SCHOOL : .....

## INSTRUCTIONS:

- This question paper contains 30 questions.
- First 25 questions (1 to 25) are single correct answer type. Each question carries 3 marks.
- Next 5 questions (26 to 30) are one or more than one correct answer type. Each question carries 3 marks.
- No negative marks.
- You have not allowed to use a calculator or any other electronic devices in the examination hall.
- Read the instructions given in the answer sheet(OMR sheet) before answering the questions.
- The answer sheet should be returned to the invigilator before leaving the examination hall (You can retain the question paper with you)
- Results will be available at www.simsolympiads.com

## Single Correct Answer Type : $25 \times 3 = 75$

1. **The smallest number which when divided by 20, 25, 35 and 40 leaves a remainder of 14, 19, 29 and 34 respectively is**

   1) 1394 2) 1404 3) 1664 4) 1406

2. **The value of** $3\frac{1}{12}-\left[1\frac{3}{4}+\left\{2\frac{1}{2}-\left(1\frac{1}{2}-\frac{1}{3}\right)\right\}\right]$ **is _____.**

   1) $\frac{8}{3}$ 2) 2 3) 1 4) 0

3. **Reena walked from A to B in the East 10 metres. Then she turned to the right and walked 3 metres. Again she turned to the right and walked 14 metres. How far is she from A ?**

   1) 4 m 2) 5 m 3) 24 m 4) 25 m

4. **26 squares, each with area 25 sq.cm, are placed next to each other in two rows to form a rectangle. What is the perimeter of this rectangle ?**

   1) 550 cm 2) 420 cm 3) 150 cm 4) 130 cm

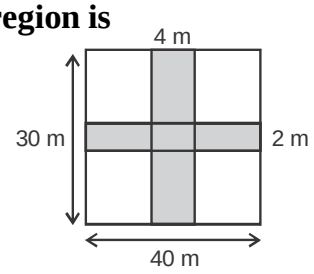
**5. The area of the shaded region is**

1) 264 $m^2$

2) 192 $m^2$

3) 190 $m^2$

4) 36 $m^2$




**6. The average of 5 numbers is 25. If 1 is added to the 1st number, 2 is added to the 2nd number, 3 is added to the 3rd number, and so on upto the 5th number. The new average is:**

1) 25 2) 20 3) 40 4) 28

**7. If ` 60 is divided into two parts in the ratio of 2 : 3, the difference between the two parts is**

1) ` 1 2) ` 5 3) ` 10 4) ` 12

**8. Integers x and y, define $x * y$ to be the integer such that $x * y = x^y + y^x$. If $2 * p = 100$, then p = ____.**

1) 2 2) 4 3) 6 4) 10

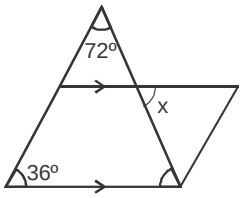
**9. In the figure given below, x is equal to**

1) 72º

2) 36º

3) 58º

4) 68º




**10. The first, third and fourth terms of a proportion are 40, 60 and 45 respectively, then the second term is _____.**

1) 20 2) 30 3) 40 4) 50

**11. If $\frac{2^x}{1+2^x} = \frac{1}{4}$ then the value of $\frac{8^x}{1+8^x}$ is _____.**

1) $\frac{1}{3}$ 2) $\frac{1}{28}$ 3) 28 4) $\frac{1}{64}$

**12. In a triangle XYZ; if m∠X is 20 more than m∠Y and 25 more than m∠Z, then find m∠X.**

1) 55º 2) 50º 3) 70º 4) 75º

**13. The cost of carpeting at the rate of ` 6 per square meter if the length and width of a hall are 60m and 50m respectively is**

1) ` 18000 2) ` 15795 3) ` 15594 4) ` 12000

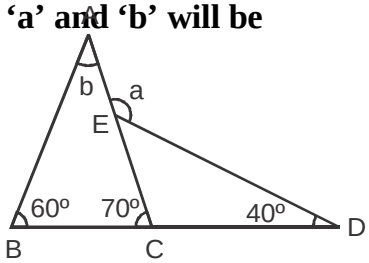
**14. In the figure, the measure of 'a' and 'b' will be**

1) 100º, 80º

2) 120º, 40º

3) 150º, 50º

4) 110º, 50º



**15. The number of years in which ` 400 will earn ` 42 as simple interest at $3\frac{1}{2}$% p.a. is**

1) 5 years 2) 3 years 3) 6 years 4) $\frac{11}{18}$ years

**16. A shopkeeper sold 12.750 kg of sugar on first day. On the second day he sold 38.250 kg of sugar. On the third day he sold 50.500 kg of sugar. How much sugar did the shopkeeper sell ?**

1) 100 kg 2) 101 kg 3) 102.5 kg 4) 101.5 kg

**17.** $\left(6\frac{1}{2}+1\frac{2}{3}-\frac{1}{4}\right)\div\left(\frac{3}{5}+1\frac{3}{7}\times\frac{7}{15}\right)$ = _____.

1) $\frac{24}{5}$ 2) $\frac{25}{4}$ 3) $\frac{61}{4}$ 4) $\frac{27}{4}$

**18. The cost of printing tickets for a game is ` 50 for each 200 tickets plus a fixed charge of ` 75. What is the best estimate of the cost of printing 500 tickets ?**

1) ` 500 2) ` 250 3) ` 200 4) ` 125

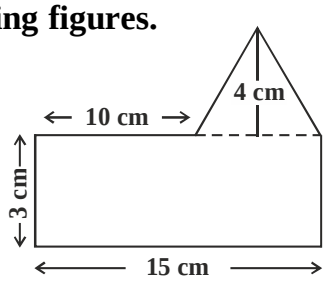
**19. Find the area enclosed by each of the following figures.**

1) 45 sq.cm

2) 55 sq.cm

3) 40 sq.cm

4) 35 sq.cm




**20. The ratio of two numbers is 3 : 5 by subtracting 9 from each the ratio becomes 12 : 23, then the numbers are**

1) 33, 55 2) 55, 65 3) 45, 75 4) 24, 40

**21. In the quiz, positive marks were given for correct answers and negative marks for incorrect answers. If Ramu's scores in five successive rounds were 35, –10, –15, 20 and 5. What is his total score at the end ?**

1) 25 2) 35 3) 45 4) 55

**22. The temperature at 12 noon was 10°C above zero. If it decreases at the rate of 2°C per hour until midnight, what would be the temperature at 9 a.m. ?**

1) –8°C 2) –6°C 3) 8°C 4) 6°C

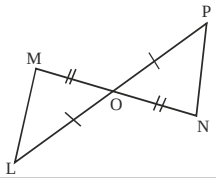
**23. How many one-fourths need to be added to $2\frac{1}{4}$ to make 5 ?**

1) 3 2) 4 3) 5 4) 11

**24. 4 is added to a number and the sum is multiplied by 5. If 20 is subtracted from the product and the difference is divided by 8, the result is equal to 10. Find the number.**

1) 16 2) 12 3) 8 4) 20

**25. In the given figure, identify the triangles that are congruent, by which property we can conclude that ML || NP ?**




1) RHS 2) AAS

3) SAS `4) AAA

## One Correct Answer Type : 5 × 3 = 15M

**26. Which of the following is FALSE ?**

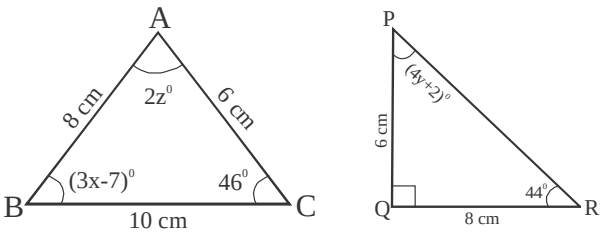
1) The mean of the first 5 natural numbers is the same as their median.

2) The mean of the first 5 natural numbers is the same as the mean of the first 5 whole numbers.

3) The median of the first 5 whole numbers is the same as the mean of the first 5 natural numbers.

4) The mode of first 5 natural numbers is 5.

**27. From the adjoining congruent triangles, the values of x, y and z are _____.**




1) z = 45 2) x = 17 3) z = 42 4) y = 11

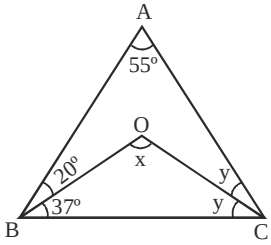
**28. In the given figure, which of the following is true ?**

1) x = 71°

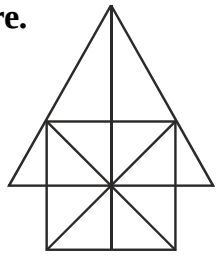
2) x = 109°

3) y = 34°

4) y = 60°




**29. Count the number of triangles and squares in the given figure.**



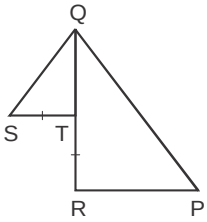
1) 26 triangles

2) 6 squares

3) 28 triangles

4) 5 squares

**30. T is a point on side QR of $\Delta PQR$ and S is a point such that RT = ST, then**




1) PQ + PR > RQ

2) ST + TQ > QS

3) ST – TR > TQ

4) PQ + PR > QS

*** ***ALL THE BEST*** ***