



S I M S[®]

(SCHOLARS INTEGRAL MATHS & SCIENCE OLYMPIADS)



BIGGEST NATIONAL LEVEL OLYMPIAD (STAGE - II) : 2018-19

SIMO QUESTION PAPER

MAX. MARKS : 100

TIME: 60 MIN.

NAME OF THE STUDENT :

HALL TICKET NUMBER :

NAME OF THE SCHOOL :

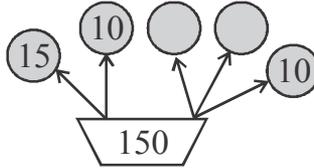
INSTRUCTIONS:

- ✦ This question paper consists of 25 questions.
- ✦ All questions are single correct answer type.
- ✦ Each question carries 4 marks and no negative marks.
- ✦ Check whether 25 questions printed or not.
- ✦ Read the instructions carefully given on the OMR sheet.
- ✦ Hand over OMR Sheet before leaving the exam hall.
- ✦ Retain Question paper with you.

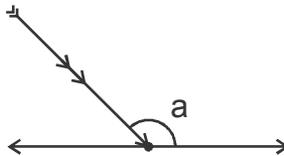
Single Correct Answer Type:

$25 \times 4 = 100$

1. The number in the balloons related in some way. What are the missing numbers ?

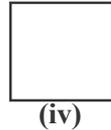
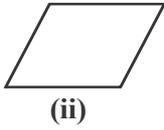
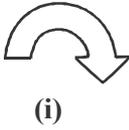


- 1) 2, 5 2) 3, 5 3) 4, 3 4) 6, 5
2. Add : $37,43,838 + 8,33,848 + 7,43,848$.
- 1) 52,21,534 2) 53,21,534
3) 53,11,534 4) 53,21,434
3. The cost of wooden chair is ₹1357. What is the cost of 24 chairs ?
- 1) ₹32,568 2) ₹3,52,645
3) ₹32,586 4) ₹38,625
4. A car can travel 400 km on 40 litres of petrol. How far can the car travel if it has 50 litres of petrol in its petrol tank ?
- 1) 360 km 2) 189 km 3) 525 km 4) 500 km
5. A hunter throws an arrow to kill a deer but it lands on the ground as shown in the picture. What type of angle 'a' does it make with the ground ?



- 1) Obtuse 2) Right 3) Straight 4) Acute

6. Which of the following are symmetric figures ?



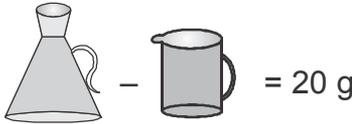
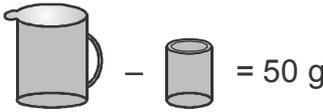
1) (i) and (ii)

2) (iii) and (iv)

3) (ii), (iii) and (iv)

4) (i),(ii),(iii) and (iv)

7. Given



If total weight of ,  and  is 240 g,

then what is the weight of  ?

1) 100 grams

2) 110 grams

3) 50 grams

4) 90 grams

8. Harry had 500 coins in a jar. He sorted the coins into 25 different stacks. Each stack had the same number of coins. How many coins were in each stack?

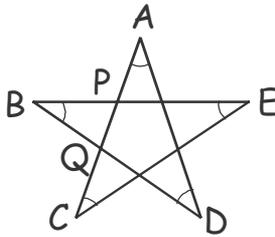
1) 20

2) 45

3) 25

4) 12

9. In the star shape shown in figure, the sum of the angles marked at the corners A, B, C, D, E is



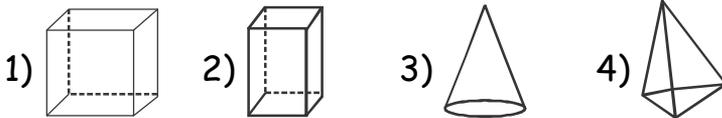
- 1) 90° 2) 135° 3) 180° 4) 140°

10. Find the rule for pattern shown below,

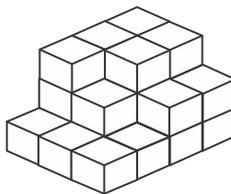
850 900 950 1000 1050

- 1) Counting by 5 2) Counting by 10
 3) Counting by 50 4) Counting by 15

11. Which of the following has a curved surface and a flat surface ?

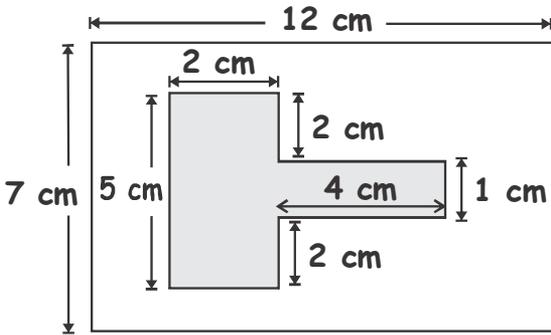


12. What is the total number of cubes in the given figure ?



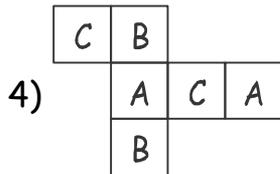
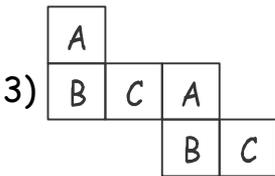
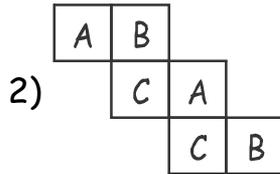
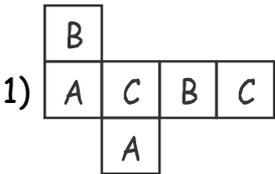
- 1) 13 2) 15 3) 18 4) 25

13. Find the area of the unshaded part of the figure ?



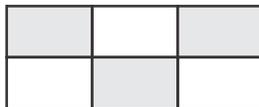
- 1) 72 cm^2 2) 12 cm^2 3) 70 cm^2 4) 84 cm^2

14. Which net would make a cube where no two faces having same alphabet meet to form an edge ?



15. Tina shades in 3 spaces on a game board. What fraction of the game board is shaded ?

Game Board



- 1) $\frac{1}{2}$ 2) $\frac{3}{5}$ 3) $\frac{3}{3}$ 4) $\frac{1}{3}$

16. You need to travel from A to B along the lines as shown in the sketch. You may only move downwards.

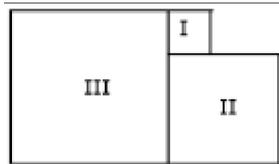
The number of different paths that can be taken from A to B is



- 1) 9 2) 10 3) 11 4) 12

17. The figures I, II and III are squares.

The perimeter of I is 12 units and the perimeter of II is 24 units. The perimeter of III is



- 1) 36 units 2) 18 units 3) 9 units 4) 80 units

18. The figure below shows a date.



How many more right angles are there in the numbers than in the letters ?

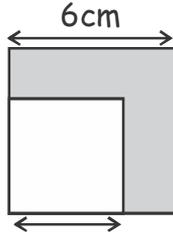
- 1) 6 2) 10 3) 16 4) 20

19. I have 6 faces, 8 vertices and 12 edges. Which of the following shape will not look like me ?

- 1)  2)  3)  4) 

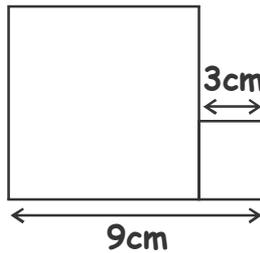
20. The figure below is made up of 2 overlapping squares. The area of the shaded part is 20 cm^2 .

The length of the bigger square is 6 cm. Find the length of the smaller square.



- 1) 2 cm 2) 4 cm 3) 5 cm 4) 3 cm

21. What is the total area of the squares below ?



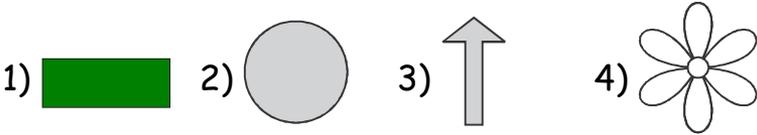
- 1) 56 sq.cm 2) 49 sq.cm 3) 45 sq.cm 4) 42 sq.cm

22. The given set represents which of the following shape ?

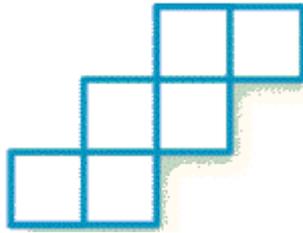


- 1)  2)  3)  4) 

23. In the following figures, which figure has only one line of symmetry ?



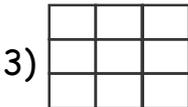
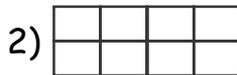
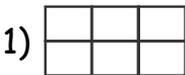
24. How many rectangles are there in the given figure, where the square is also one of the rectangle ?



- 1) 6 2) 5 3) 11 4) 9

25. Which figure has an area of 8 sq. units and a perimeter of 12 units ?

(Each square block is of side 1 unit).



*** ALL THE BEST ***