

Sample Paper

(2020-21)

Class 7

Unicus Mathematics Olympiad



Section – Class* *Syllabus covered	Total Questions	Marks per Questions	Total Questions
Classic Section – Class 6	28	1	28
Classic Section – Class 5	12	1	12
Scholar Section – Class 6	7	2	14
Scholar Section – Class 5	3	2	6
Grand Total	50		60

1. In a five-digit number, the digit at the hundred's place is 2 and the digit at the one's place is twice the digit in the hundred's place. The number has no thousands. The digit at the ten thousand's place is the sum of the digit at the hundred's place and the digit at the one's place. The digit at the ten's place is the digit at the ten-thousand's place minus 1. Find the number:

a) 52,064

b) 60,254

c) 60,245

d) 62,054

Correct Answer: b

1 Mark

2. In a farm, the number of hens and goats is in the ratio of 3:5. If 20 more hens are bought, the ratio of numbers of hens and goats becomes 4:5. How many goats are there in the farm?

a) 20

b) 40

c) 60

d) 100

Correct Answer: d

1 Mark

3. Rachna subtracted 15 from three-fifth of y and got 10. Which of the following options is the correct equation form of the above statement?

a) 15 - 3y/5 = 10

b) 3y/5 - 10 = 15

c) 3y/5 - 15 = 10

d) 5y/3 - 15 = 10

Correct Answer: c

1 Mark

4. Out of a salary of Rs. 45,000, a man keeps aside one-third of his salary as savings. Out of the remaining, he spends 50% on food and 20% on house rent. How much amount did he spend on food and house rent respectively?

a) Rs. 15,000, Rs. 6,000

b) Rs. 22,500, Rs. 9,000

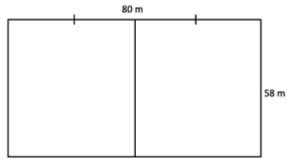
c) Rs. 15,000, Rs. 3,000

d) Rs. 3,000, Rs. 15,000

Correct Answer: a

1 Mark

5. In the given figure, the larger rectangle measures 58 m x 80 m. It has been divided into two equal parts as shown in the figure. Which of the given statements is correct?



- a) The perimeter of the bigger rectangle is 160 m.
- b) The perimeter of smaller rectangle is half of perimeter of bigger rectangle.
- c) The perimeter of the bigger rectangle is 80 m more than the perimeter of the smaller rectangle
- d) The perimeter of the smaller rectangle is 232 m.

Correct Answer: c 1 Mark

- 6. Look at the statements given below:
 - I. The common end point of the two rays forming an angle is called the vertex of the angle.
 - II. The sum of the lengths of any two sides of a triangle is always greater than the length of the third side.
 - III. Two angles of an isosceles triangle are always equal.
 - IV. A quadrilateral has four diagonals.

Which of the following statement/s is/are true?

a) Only I and II

b) I, II and III

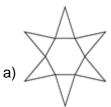
c) I, III and IV

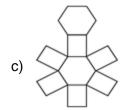
d) III and IV

Correct Answer: b

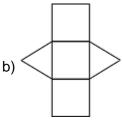
1 Mark

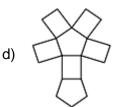
7. Which one of the given options is a net for hexagonal prism?





Correct Answer: c





1 Mark

8. Match the columns:

Column A	Column B
(a) (1/2 + 1/3) of 6	(p) (3/4 - 1/3) of 12
(b) (1/3 + 1/6) of 18	(q) (5/2 - 2/3) of 6
(c) (1/4 + 1/3) of 12	(r) (5/4 - 1/2) of 12
(d) (1/5 + 1/6) of 30	(s) (3/4 - 1/6) of 12

Correct Answer: d

1 Mark

- 9. The sum of two numbers, when multiplied with each of the numbers separately, then the results of the above multiplications are 4,664 and 3,080, respectively. Find the difference between the numbers:
 - a) 14

b) 18

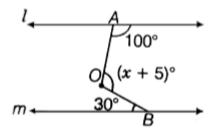
c) 22

d) 26

Correct Answer: b

2 Marks

10. In the given figure, if $I \parallel m$, then find the value of x:



- a) 205°
- c) 130°

- b) 175°
- d) 105°

Correct Answer: d

2 Marks