Register Number

9 1 4

# THIRD MID TERM TEST - 2024

## **MATHEMATICS**

Time Allowed: 1.30 Hours]

[Max. Marks: 50

#### PART - A

	Choose the correct	ct Answer.		7x1=				
1.	The semi-perimeter of a triangle having sides 15 cm, 20 cm and 25 cm is							
	(a) 60 cm	(b) 45 cm	6/130 cm	(d) 15 cm				
2.	The perimeter of an	equilateral triangle is	30cm. The area is	and was a second				
	(a) 10√3 cm²	(b) 12√3 cm²	(c) 15√3 cm²	(4) 25√3 cm²				
3.	The lateral surface area of a cube of side 12 cm is							
	(a) 144 cm <sup>2</sup>	(b) 196 cm²	(e) 576 cm <sup>2</sup>	(d) 664 cm <sup>2</sup>				
4.	The total surface ar	The total surface area of a cuboid with dimension 10 cm x 6 cm x 5 cm is						
	(a) 280 cm <sup>2</sup>	(b) 300 cm <sup>2</sup>	(c) 360 cm <sup>2</sup>	(d) 600 cm <sup>2</sup>				
	A particular observation which occurs maximum number of times in a given data is called its							
	(a) Frequency	(b) Range	(c) Mode	(d) Median				
6.	The meann of 5, 9, x, 17 and 21 is 13, then find the value of x							
	(a) 9	(b) 13	(c) 17	(d) 21				
7.	The mean of the square of first 11 natural numbers is							
	(a) 26	(b) 46	(c) 48	(d) 52				
			ADT D					

### II. Answer any 9 Questions.

9x2=18

- 8. Using Heron's formula, find the area of a triangle whose sides are 10 cm, 24 cm and 26 cm.
- 9. Find the area of an equilateral triangle whose perimeter is 180 cm.
- 10. Find the Total Surface Area and Lateral Surface Area of the cube, whose side is 5 cm.
- 11. Find the volume of the cube whose side is 10 cm.
- 12. Find the volume of a cuboid whose dimensions are length = 12cm, breadth = 8 cm, height = 6 cm.

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- 13. In a week, temperature of a certain place is measured during winter are as follows 26°C, 24°C, 28°C, 31°C, 30°C, 26°C, 24°C. Find the mean temperature of the week
- 14) The following are scores obtained by 11 players in a cricket match 7, 21, 45, 12, 56, 35, 25, 0, 58, 66, 29. Find the median score.
- 15. Find the Median of the given data. 36, 44, 86, 31, 37, 44, 86, 35, 60, 61

16. Find the mode of the given data: 3.1, 3.2, 3.3, 2.1, 1.3, 3.3, 3.1.

In a distribution, the mean and mode are 66 and 60 respectively. Calculate the median.

#### PART - C

Answer any 5 questions. III.

5x5=25

- 18. Find the Total Surface Area and Lateral Surface Area of a cuboid whose dimensions are : length = 20 cm, breadth = 15 cm, height = 8 cm.
- 19. The dimensions of a match box are 6 cm x 3.5 cm x 2.5 cm. Find the volume of a packet containing 12 such match boxes.
- 20. In a class test in mathematics, 10 students scored 75 marks, 12 students scored 60 marks, 8 students scored 40 marks and 3 students scored 30 marks. Find the mean of their score.
- 21. The median of observation 11, 12, 14, 18, x+2, x+4, 30, 32, 35, 41 arranged in ascending order is 24. Find the value of x.
- 22. Find the mode of the following data.

Marks	0-10	10-20	20-30	30-40	40-50
No. of students	22	38	46	34	20

23. The monthly salary of 10 employees in a factory are given below.

5000, 7000, 5000, 7000, 8000, 7000, 7000, 8000, 7000, 5000. Find the Mean, Median and Mode.

V/9/Mat/2