



## Standard 9

### MATHS

Marks: 50

Time: 1.30 Hours

#### Part - I

**Attempt all the questions.**

**8×1=8**

- 1) If the side of a triangle are 3cm, 4 cm and 5 cm, then the area is  
 a)  $3\text{cm}^2$                       b)  $6\text{cm}^2$                       c)  $9\text{cm}^2$                       d)  $12\text{cm}^2$
- 2) If the ratio of the sides of two cubes are 2 : 3, then ratio of their surface areas will be  
 a) 4 : 6                      b) 4 : 9                      c) 6 : 9                      d) 16 : 36
- 3) The volume of a cuboid is  $660\text{cm}^3$  and the area of the base is  $33\text{cm}^2$ . Its height is  
 a) 10 cm                      b) 12 cm                      c) 20 cm                      d) 22 cm
- 4)  $1\text{m}^3 = \dots\dots\dots$  litres  
 a) 10                      b) 100                      c) 1000                      d) 10000
- 5) Let m be the mid point and b be the upper limit of a class in a continuous frequency distribution. The lower limit of the class is  
 a)  $2m - b$                       b)  $2m + b$                       c)  $m - b$                       d)  $m - 2b$
- 6) The algebraic sum of the deviations of a set of n values from their mean is  
 a) 0                      b)  $n - 1$                       c) n                      d)  $n + 1$
- 7) The mean of 5, 9, x, 17 and 21 is 13, then find the value of x.  
 a) 9                      b) 13                      c) 17                      d) 21
- 8) The arithmetic mean of 6 values is 45 and if each value is increased by 4, find the arithmetic mean of new set of values.  
 a) 45                      b) 49                      c) 41                      d) 51

#### Part - II

**Attempt 6 questions only. Q.No. 16 is compulsory.**

**6×2=12**

- 9) Using Heron's formula, find the area of triangle whose sides are 10cm, 24cm, 26cm
- 10) A cube has the Total Surface Area of  $486\text{cm}^2$ . Find its lateral Surface area.
- 11) A cubical milk tank can hold 125000 litres of milk. Find the length of the sides in meters.
- 12) The length, breadth and height of a cuboid is 120 mm, 10 cm and 8 cm respectively. Find the volume of 10 such cuboids
- 13) Find the mode of the given data:  
 3.1, 3.2, 3.3, 2.1, 1.3, 3.3, 3.1
- 14) For the following ungrouped data 10, 17, 16, 21, 13, 18, 12, 10, 19, 22. Find the median
- 15) In a distribution, the mean and mode are 66 and 60 respectively. Calculate the median.
- 16) In a week, temperature of a certain place is measured during winter are as follows  $26^\circ\text{C}$ ,  $24^\circ\text{C}$ ,  $28^\circ\text{C}$ ,  $31^\circ\text{C}$ ,  $30^\circ\text{C}$ ,  $26^\circ\text{C}$ ,  $24^\circ\text{C}$ . Find the mean temperature of the week.

**kindly send me your key answer to our email id - [Padasalai.net@gmail.com](mailto:Padasalai.net@gmail.com)**

Attempt 6 questions only. Q.No. 24 is compulsory.

6×5=30

- 17) A farmer has a field in the shape of a rhombus. The perimeter of the field is 400 m and one of its diagonal is 120m. He wants to divide the field into two equal parts to grow two different types of vegetables. Find the area of the field.
- 18) Three identical cubes of side 4 cm are joined end to end. Find the total surface area and lateral surface area of the new resulting cuboid.
- 19) The length, breadth and height of a chocolate box are in the ratio 5 : 4 : 3. If its volume is  $7500 \text{ cm}^3$ , then find its dimensions.
- 20) The average mark of 25 students was found to be 78.4. Later on it was found that score of 96 was misread as 69. Find the correct mean of the marks.
- 21) Find the mean of the following data:

<b>Class Interval</b>	0-10	10-20	20-30	30-40	40-50
<b>Frequency</b>	5	7	15	28	8

- 22) The following are the marks scored by the students in an examination. Calculate the median

<b>Class</b>	0-10	10-20	20-30	30-40	40-50	50-60
<b>No of students</b>	2	7	15	10	11	5

- 23) Find the mode of the following data

<b>Marks</b>	0-10	10-20	20-30	30-40	40-50
<b>No of students</b>	22	38	46	34	20

- 24) The side of a metallic cube is 12cm. It is melted and formed into a cuboid whose length and breadth are 18 cm and 16 cm respectively. Find the height of the cuboid.

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