

Tsi9M

Tenkasi DistrictThird Mid Term Test - 2024

06-03-2024

Standard 9

Time: 1.30 Hours

MATHS

Marks: 50

Part - I**Choose the most appropriate answer from the given alternatives. 7x1=7**

- 1) The Semi perimeter of a triangle having sides 15cm, 20cm, 25cm is
a) 60 cm b) 45cm c) 30 cm d) 15 cm
- 2) The total surface area of a cuboid with dimension 10cm × 6 cm × 5 cm is
a) 280 cm² b) 300 cm² c) 360 cm² d) 600 cm²
- 3) If the ratio of the sides of the cubes are 2 : 3 then the ratio of their surface area will be
a) 4 : 6 b) 4 : 9 c) 6 : 9 d) 16 : 36
- 4) The capacity of a water tank of dimensions 10 m × 5 m × 1.5 m is
a) 75 liters b) 750 litres c) 7500 litres d) 75000 litres
- 5) 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
- 6) The particular observations which occurs maximum number of times in a given data is called its
a) frequency b) range c) mode d) medium
- 7) The mean of the square of first 11 natural number is
a) 26 b) 46 c) 48 d) 52

Part - II**Answer any 5 questions. Q.No. 14 is compulsory.****5x2=10**

- 8) Find the area of an equilateral triangle whose perimeter is 180 cm
- 9) Find the volume of a cuboid whose dimensions are length = 12cm, breadth = 8cm, height = 6 cm
- 10) A cube has the total surface area of 486cm². Find its lateral surface area.
- 11) Find the volume of cube whose side is 10cm.
- 12) 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.
- 13) The arithmetic mean of 6 value is 45, and if each value is increased by 4, then find the arithmetic mean of new set of values
- 14) If the total surface area of a cube is 2400cm². then find the lateral surface area.

Tsi9M

2

Part - III

Answer any 5 questions. Q.No. 21 is compulsory.

5x5=25

- 15) The length of sides of a triangular field are 28m, 15m & 41 m. Calculate the area of the field. Find the cost of levelling the field at the rate of Rs.20 per m².
- 16) The dimensions of a sweet box are 22cm × 18 cm × 10cm. How many such boxes can be packed in a carton of dimensions 1m × 88 cm × 63 cm?
- 17) Three identical cubes of sides 4cm are joined end to end. Find the total surface area and lateral surface area of the new resulting cuboid.
- 18) In a class, weight of students is measured for the class records, calculate mean weight of the class students using direct method.

Weight in kg	15-25	25-35	35-45	45-55	55-65	65-75
No of students	4	11	19	14	0	2

- 19) In a class test in maths, 10 students scored 75 marks, 12 students scored 60 marks, 8 students scored 40 marks & 3 students scored 30 marks. Find the mean of their score.
- 20) A cubical container of side 6.5 m is to be painted on the entire outer surface. Find the area to be painted and total cost of painting at the rate of Rs.24 per m².
- 21) The dimensions of a first tank are 3.8 m × 2.5 m × 1.6 m. How many litres of water it can hold?

Part - IV

1x8=8

- 22) A farmer has a field in the shape of a rhombus. The perimeter of the field is 400 m and one of the diagonal is 120 m. He wants to divide the field into two equal parts to grow two different types of vegetables. Find the area of the field.

(OR)

The following data gives the number of residents in an area based on their age. Find the average age of the residents.

Age	0-10	10-20	20-30	30-40	40-50	50-60
Number of Resident	2	6	9	7	4	2
