

I. Choose the correct answer: 4x1=4

1. The perimeter of an equilateral triangle is 30cm. The area is
a) $10\sqrt{3}$ cm² b) $12\sqrt{3}$ cm² c) $15\sqrt{3}$ cm² d) $25\sqrt{3}$ cm²
2. 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
3. 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
4. The interior angle made by the side in a parallelogram is 90° then the parallelogram is a _____.
a) rhombus b) rectangle c) trapezium d) kite

II. Answer any three of the following: 3x2=6

5. Find the total surface and the lateral surface area of a cuboid whose dimensions are 7.5m, 3m and 5m respectively.
6. A cubical milk tank can hold 125000 litres of milk. Find the length of its side in metres.
7. Find the median of the given data 36, 44, 86, 31, 37, 44, 86, 35, 60, 51
8. For the data 11, 15, 17, x+1, 19, x-2, 3 if the mean is 14, find the value of x.

II. Answer any three of the following: (Q.No.11 is compulsory):

3x5=15

9. 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.
10. A park is in the shape of a quadrilateral. The sides of the park are 15m, 20m, 26m and 17m and the angle between the first two sides is a right angle. Find the area of the park.
11. Draw a right triangle whose hypotenuse is 10cm and one of the legs is 8cm. Locate its incentre and also draw the incircle.
12. The length, breadth and height of a chocolate box are in the ratio 5:4:3. If its volume is 7500cm³, then find its dimensions.