

MATHSSECTION – A

(1 X 6 = 6)

- 1) Write 3 integers succeeding -9
- 2) Write a fraction equivalent to $\frac{1}{2}$ with denominator 60.
- 3) What should be added to 40.152 to get 63.952 ?
- 4) Subtract :-
from
- 5) Simplify :-
 $3^2 \times 10^4$
- 6) Add :-
3p, 9q and 6q

SECTION – B

(6 X 2 = 12)

- 1) 11% of a number is 44. Find the number.
- 2) Give two examples from your daily life which are in the form of a pyramid.
- 3) Find the perimeter of a square whose area is 1764cm^2
- 4) Find the mean of first six multiples of 3.
- 5) A coin is tossed 1000 times with the following frequencies :
Head = 455, Tail = 545
Calculate the probability of each event
- 6) Two numbers are such that their product is 391. If both the numbers are tripled and multiplied again, then what will be their product ?

SECTION – C

(10 X 3 = 30)

- 1) After spending 75% of his monthly income, a man saves Rs 5000 every month. Find his monthly income.
- 2) By selling a bedsheet for Rs 75, a man loses 4%. For what amount should he sell it so as to gain 20% ?
- 3) Construct an isosceles triangle ABC in which $AB = AC = 6\text{cm}$ and $BC = 7\text{cm}$.
- 4) Construct a right – angled triangle in which hypotenuse is of length 5.4cm, and one of the acute angles measures 60° .
- 5) Given below are the ages of 25 students of class vii in a school. Prepare the discrete frequency distribution.
15, 16, 16, 14, 17, 17, 16, 15, 15, 16, 16, 17, 15, 16, 16, 14, 16, 15, 14, 15, 16, 16, 15, 14, 15
- 6) The following data have been arranged in ascending order
18, 20, 25, 26, 30, x, 37, 38, 39, 48
If the median of the data is 35, find x.
- 7) Chetan is reading a book which has 303 pages. How many times does the digit 3 get printed in the page numbers ? How many pages are there which have only one 3 present ?
- 8) A track is in the form of a ring whose inner circumference is 352m and outer circumference is 396m. Find the area and width of the park.
- 9) Two poles of heights 6m and 11m stand on a plane ground. If the distance between their

feet is 12m, determine the distance between their tops.

10) Solve :-

$$4(3x + 2) - 5(6x - 1) = 2(x - 8) - 6(7x - 4) + 4x$$

SECTION – D

(8 X 4 = 32)

- 1) Priya has 76 coins, all of 50 paise and 25 paise. Find the number of each type of coins if the total money she has is Rs 29.
- 2) Arrange the following ratios in descending order of magnitude.
 - i) 5 : 7, 20 : 21, 3 : 8 and 15 : 17
 - ii) 1 : 2, 2 : 3, 3 : 4 and 4 : 5
- 3) By selling a car for Rs 34,000, a man loses 15%. If he sells the same car for Rs 44,000, find His profit per cent.
- 4) AD and BE are respectively the altitudes of $\triangle ABC$ such that $AE = BD$. Prove that $AD = BE$.
- 5) In a school, there are five sections of class vii. The number of students in each section is given Below. Construct a bar graph with following data.

Section	A	B	C	D	E
Number of students	45	48	46	50	52

- 6) Evaluate each of the following :-
 - i) $0.528 \times 100 + 0.15 \div 0.5$
 - ii) $9.83 \div 2.5 - 6.81 \div 3.2$
- 7) Subtract the sum of $x + 2y + 3z$ and $-3x + 4y + 6z$ from the sum of $9x - 3y + 5z$ and $3x - 4y + z$.
- 8) The base of an isosceles triangle measures 24cm, and its area is 192cm^2 . Find its perimeter.