PRISM WORLD

Std.: 10 (English) **Maths - I** **Marks: 20**

Date: **Time: 1 hrs**

Chapter: 6

Q.1 Choose the carrect alternatives. **(3)**

1)

$\Sigma f_i d_i = 5400$, $\Sigma f_i = 1000$, then $\overline{d}$ = ...

(a) 5.4 (b) $\frac{10}{54}$ (c) 54 (d) 540

2) The expenditure Rs. 45,000 on cement was shown by a sector of central angle of 75°. What was the total expenditure of the construction?

a. 2,16,000 b. 3,60,000 c. 4,50,000 d. 7,50,000

3) Consider the following frequency median is

Class	0 - 5	6 - 11	12 - 17	18 - 23	24 - 29
Frequency	13	10	15	8	11

The upper limit of the median class is

a. 17 b. 17.5 c. 18 d. 18.5

Q.2 Solve the following question. (Any Two) **(4)**

1) Given below is the frequency distribution of marks scored by the students:

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50
Number of students	3	10	20	5	2

Calculate mean marks scored by a student by using 'Direct Method'.

2) Form the given table, find the median number of rooms occupied per day in a hotel:

Number of rooms occupied	**Number of days (f)**	**(c.f.) (less than type)**
0 - 10	5	5
10 - 20	15	20
20 - 30	25	45
30 - 40	10	55
40 - 50	5	60

3) The following table shows classification of number of workers and the number of hours they work in a software company. To find the median of the number of hours they work, complete the following activity.

Daily No. of hours	8 - 10	10 - 12	12 - 14	14 - 16

Number of workers	150	500	300	50

Q.3 Solve the following question. (Any Two) **(6)**

1) Draw a pie diagram to represent the world population of countries given in the following table after determining the valued of

Country	India	China	Russia	USA	Other	Total
Percentage of population	15	20	a	a	25	100

2) A tyre manufacturing company decides to study the variations in mileage given by its product. The data on 100 buses is available.

Distance travelled (in thousand km)	20 - 40	40 - 60	60 - 80	80 - 100	100 - 120
Number of buses	8	25	40	24	3

Find the median distance travelled by a bus.

3) The following table shows the weight (in kg) of 100 persons. Find the modal weight of a person.

Weight (in kg)	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
Number of persons	12	24	40	16	8

Q.4 Solve the following question. (Any One) **(4)**

1) The age group and number of persons, who donated blood in a blood donation camp is given below. Draw a pie diagram from it.

Age group (Yrs)	20 - 25	25 - 30	30 - 35	35 - 40
No. of persons	80	60	35	25

2) Following is the frequency distribution of waiting time at the ATM centre. Draw a histogram to represent the data:

Waiting time (in seconds)	0 - 30	30 - 60	60 - 90	9 - 120
Number of customers	20	25	50	30

Q.5 Solve the following question. (Any One) **(3)**

1) The no. of hours spent by a school boy in different activities in a day is given below

Activity	**Sleep**	**School**	**Play**	**Homework**	**Other**	**Total**
No. of hours	8	7	2	4	3	24

Represent the above information using pie diagram.

2) The prices of different articles and demand for them is shown in the following frequency distribution table. Find the median of the prices.

Price (Rupees)	20 less than	20-40	40-60	60-80	80-100
No. of articles	140	100	80	60	20