

Date : 16/11/2022
Submission Date : 01/12/2022
Before 2.00 p.m.

Assignment 2

1. A dice was rolled 20 times. On each roll the dice shows a value from 1 to 6. The results have been recorded in the table below: Find mean and median

Value	Frequency
1	3
2	5
3	2
4	4
5	3
6	3

2. An educational survey was conducted on 20 families by a group of school students to collect data on the family size. The following table showcases data on family size and the number of families.

Family Size	1 – 3	3 – 5	5 – 7	7 – 9	9 – 11
No. of Families	7	8	2	2	1

Find mean, median and mode.

3. Given a frequency distribution calculate the Geometric Mean.

Class Interval	5 -- 7	8 -- 10	11 -- 13	14 -- 16	17 -- 19
Frequencies	15	18	27	10	6

4. In a work study investigation, the times taken by 20 men in a firm to do a particular job were tabulated as follows:

Time taken (min)	8 -- 10	11 -- 13	14 -- 16	17 -- 19	20 -- 22	23 -- 25
Frequencies	2	4	6	4	3	1

Prove that $Q_2 = D_5 = P_{50} = \text{Median}$

5. Following is the frequency distribution of the marks (out of 40) obtained by the students of a certain college in statistics. Calculate harmonic mean.

Class Interval	11 -- 15	16 -- 20	21 -- 25	26 -- 30	31 -- 35
Frequencies	15	20	60	150	15

6. The pupils in Mr. Middleton's class take a Maths test and get scores out of 10, which are listed below:

3	7	6	2	5	9	10	8	7	1
8	4	3	5	6	7	8	7	6	5
3	6	9	8	7	5	9	6	7	8

The pupils are asked to produce a pie chart