



INDIAN SCHOOL AL WADI AL KABIR

Class: XI	Department: Commerce
WORKSHEET: 1	Topic: Statistics- Mean, Median & Mode

MCQs

Q1. _____ is used when the sum of deviation from average should be least,

- a) Mean
- b) Mode
- c) Median
- d) All of these

Q2. Mean should be

- a) Simple
- b) Based upon all items
- c) Not capable of further algebraic
- d) All of these

Q3. Measures of central tendency are known as :

- a) Difference
- b) Average
- c) Both a and b
- d) None of these

Q4. The sum of deviation about the mean is:

- a) Zero
- b) Minimum
- c) Maximum
- d) None of these

Q5. The most appropriate measure of central tendency in case of data of varying importance

- a) Combined mean
- b) Weighted mean
- c) Assumed mean
- d) All of these

Numericals:

1. From the data given below, find the classes and the mean, median & Mode.

X	5	10	15	20	25
Frequency	2	4	6	8	10

2. From the data given below, find the classes and the median.

Mid values	10	20	30	40	50	60
Frequency	3	5	8	6	5	3

3. Marks of 10 students is 10,15, 12, 11,20,16,22,25,30 and 35. Find out the average marks.
4. Find the Mean for the following data:

Marks	10	20	30	40	50
No. of Students	15	10	40	20	15

5. Calculate the Mean using Step-Deviation:

Marks	0-4	4-8	8-12	12-16	16-20
No. of Students	4	8	2	1	5

Note:

Weighted Arithmetic Mean:

Values to be arranged are given varying importance.

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$$\bar{X}_W = \frac{\sum WX}{\sum W}$$

Where $\bar{X}_W$ = Weighted Arithmetic Mean

W = Weight, X = Values of the variables

6. The following series show the marks of 9 students. Find the median marks.

Marks	17	32	35	33	15	21	41	32	11
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7. Calculate the median from the following set of data:

Size 'X'	5	6	7	8	9
Frequency (f)	4	1	3	7	4

8. Calculate the median from the following set of data:

Size 'X'	0-10	10-20	20-30	30-40	40-50
Frequency	3	4	2	7	10

9. Calculate Mode using the Inspection Method; Marks of 10 students are as follows;

20	22	25	28	30	32	35	25	21	25
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10. Calculate the value of mode:

Marks	40	50	60	70	80	90
No. of students	2	4	8	10	5	6

11. Calculate the value of the mode using the formula.

Marks	0-10	10-20	20-30	30-40	40-50
No. of Students	3	4	15	6	8

Note:

Relationship between Mean, Median and Mode

i. In the case of symmetrical distribution

Mean = Median = Mode

ii. In the case of asymmetrical distribution

Mode = 3 Median – 2 Mean

12. Calculate Mean

Weight (in kg)	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75
Number of Students	9	6	15	3	1	2	2	1	1

Ans. The mean weight of the students is 43.875 kg.

13. Find the mean using direct method;

X	15	21	27	30	35
X					
Frequency	3	5	6	7	8

Ans. 27.655

14. Calculate the median marks of students from the following distribution. ANS= 49

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of Students	7	10	10	20	20	15	8

15. The given distribution shows the number of runs scored by some top batsmen of the world in one-day international cricket matches. Calculate mode. ANS= 4608.7

Run Scored	Number of Batsman
3000- 4000	4
4000-5000	18
5000-6000	9
6000-7000	7
7000-8000	6
8000-9000	3
9000-10000	1
10000-11000	1