

STATISTICS

CM23M101401

Multiple Choice Questions:

1 mark each

- The mean and median of a data are 14 and 15 respectively. The value of mode is:
 (a) 16 (b) 17 (c) 13 (d) 18
- Which of the following is not a measure of central tendency?
 (a) Mean (b) Median (c) Range (d) Mode
- If mode of the following data is 7, then value of k in 2, 4, 6, 7, 5, 6, 10, 6, 7, $2k + 1$, 9, 7, 13 is:
 (a) 3 (b) 7 (c) 4 (d) 2
- The measures of central tendency which can't be found graphically is:
 (a) mean (b) median (c) mode (d) none of these
- The measure of central tendency which takes into account all data items is:
 (a) mode (b) mean (c) median (d) none of these

Very Short Answer Type Questions:

2 marks each

- The mean of the following data is 7.5. Find the value of P .

x_i	3	5	7	9	11	13
f_i	6	8	15	P	8	4

- Find the mode of the given data :

Class Intervals	0-20	20-40	40-60	60-80
Frequency	15	6	18	10

- Find the median of the following given data :

x_i	6	7	5	2	10	9	3
f_i	9	12	8	13	11	14	7

Short Answer Type Questions:

3 marks each

- The mean of the following distribution is 62.8 and the sum of all frequencies is 50. Compute the missing frequencies f_1 and f_2 .

Classes	0-20	20-40	40-60	60-80	80-100	100-120	120-140
Frequency	5	f_1	10	f_2	7	8	50

- The median of the distribution given below is 35. Find the value of x and y , if the sum all frequencies is 170.

Variable	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	10	20	x	40	y	25	15

- Find the mode of following frequency distribution :

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	5	8	15	20	14	8	5

Long Answer Type Questions:

4 marks each

12. During medical check up of 35 students of a class, their weights were recorded.

Weight	Less than 38	< 40	< 42	< 44	< 46	< 48	< 50	< 52
No. of Students	0	3	5	9	14	28	32	35

Draw less than type ogive for the given data. Hence obtain the median weight from graph and verify the result by using formula.

13. Draw less than and more than ogive for the following distribution and hence obtain the median.

Marks	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of Students	14	6	10	20	30	8	12

