

1. Relationship among mean, median and mode is :

- (A)  $3 \text{ Median} = \text{Mode} + 2 \text{ Mean}$       (B)  $3 \text{ Mean} = \text{Median} + 2 \text{ Mode}$   
 (C)  $3 \text{ Mode} = \text{Mean} + 2 \text{ Median}$       (D)  $\text{Mode} = 3 \text{ Mean} - 2 \text{ Median}$

2. Calculate the median for the following distribution :

Marks obtained	Number of students
Below 10	6
Below 20	15
Below 30	29
Below 40	41
Below 50	60
Below 60	70

3. Compute the arithmetic mean for the following data :

Marks obtained	No. of students
Less than 10	14
Less than 20	22
Less than 30	37
Less than 40	58
Less than 50	67
Less than 60	75

4. Find the missing frequencies  $f_1$  and  $f_2$  in the following frequency distribution table, if  $N = 100$  and median is 32.

Class :	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	Total
Frequency	10	$f_1$	25	30	$f_2$	10	100

5. For the following frequency distribution, draw a cumulative frequency curve of less than type.

Class :	200 – 250	250 – 300	300 – 350	350 – 400	400 – 450	450 – 500	500 – 550	550 – 600
Frequency:	30	15	45	20	25	40	10	15

6. The median class for the following data is

Class	20 – 40	40 – 60	60 – 80	80 – 100
Frequency	10	12	20	22

(A) 20 - 40 (B) 40 - 60 (C) 60 - 80 (D) 80 – 100

7. Write the following frequency distribution as “more than type” and “less than type” cumulative frequency distribution.

Class :	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50
Frequency :	5	15	20	23	17

8. Find the median for the following table which shows the daily wages drawn by 200 workers in a factory.

Daily wages (in Rs.)	Less than 100	Less than 200	Less than 300	Less than 400	Less than 500
No. of workers	40	82	154	184	200

9. The mean of the data in the following table is 50. Find the missing frequencies  $f_1$  and  $f_2$ .

Class :	10 – 30	30 – 50	50 – 70	70 – 90	90 – 110	Total
Frequency :	90	$f_1$	30	$f_2$	40	200

10. Find the unknown entries a, b, c, d, e and f in the following distribution and hence find their mode.

Height (in cm) :	150–155	155–160	160–165	165–170	170–175	175–180	Total
Frequency :	12	b	10	d	e	2	50
Cumulative frequency :	a	25	c	43	48	f	