

Statistics

MCQ

1. The modal class of the following frequency distribution is

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	6	7	12	21	7	9	1	11

(a) 20-30

(b) 30-40

(c) 40-50

(d) 70-80

2. The empirical relationship between the three measures of central tendency is

(a) $3 \text{ mean} = \text{mode} + 2 \text{ median}$

(b) $3 \text{ median} = \text{mode} + 2 \text{ mean}$

(c) $3 \text{ mode} = \text{mean} + 2 \text{ median}$

(d) $\text{median} = 3 \text{ mode} - 2 \text{ mean}$

Measure of central tendency is represented by the abscissa of the point when the point of intersection of 'less than ogive' and 'more than ogive' is

(a) mean

(b) median

(c) mode

(d) None of these

3. The median class of the following distribution is

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	7	3	5	6	11	9	3	6

(a) 10-20

(b) 20-30

(c) 30-40

(d) 40-50

4. Find the mean of the following data

x	10	12	14	16	18	20
f	3	5	6	4	4	3

5. Find the value of p if the mean of the following distribution is 7.5

x	3	5	7	9	11	13
f	6	8	15	P	8	4

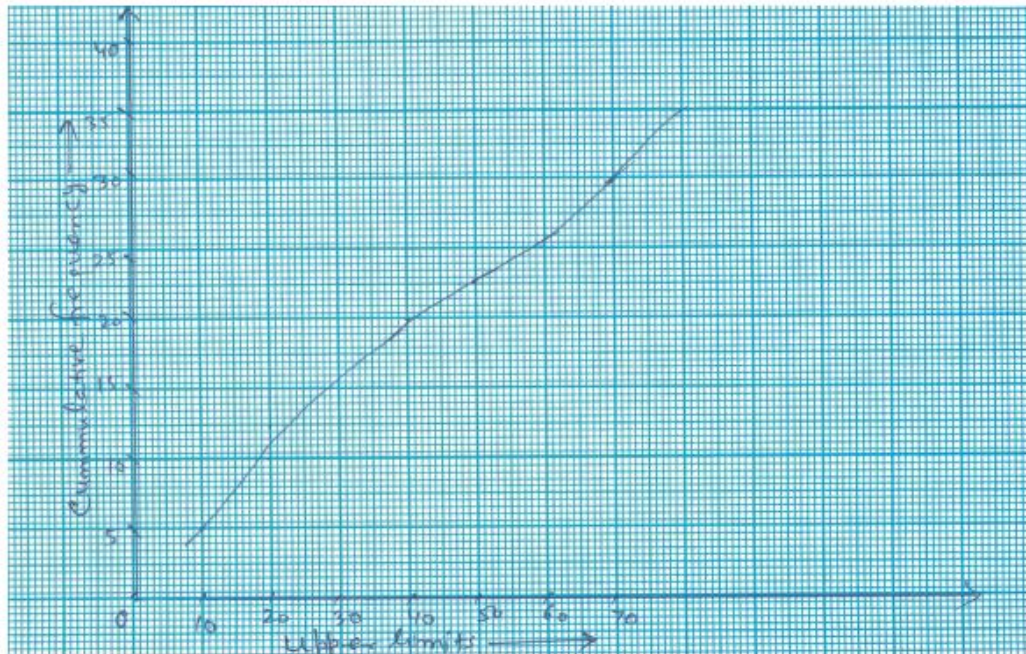
6. From the cumulative frequency table, write the frequency of the class 20-30

Marks	Less than 10	Less than 20	Less than 30	Less than 40	Less than 50
Number of Students	1	14	36	59	60

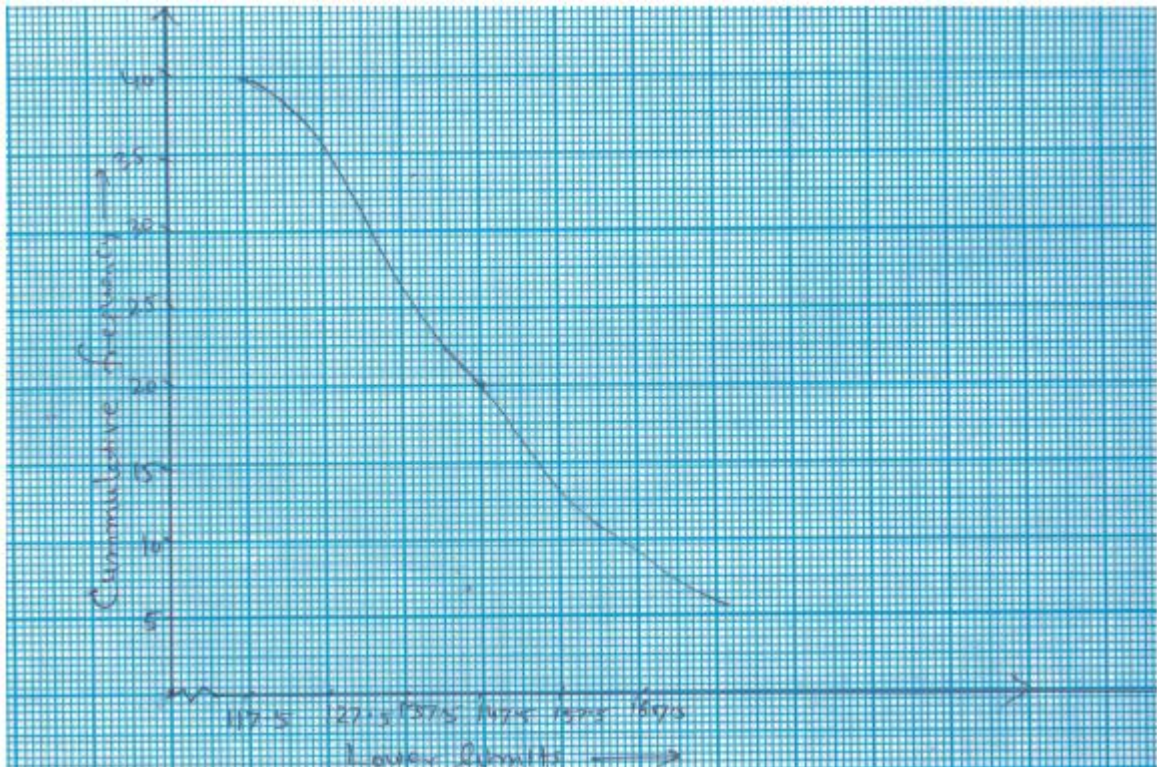
7. The following distribution gives the daily wages of a worker of a factory. Find the mean daily wages of a worker.

Daily Wage (In ₹)	Number of Workers
More than 300	0
More than 250	12
More than 200	21
More than 150	44
More than 100	53
More than 50	59
More than 0	60

8. Following is a cumulative frequency curve for the marks obtained by 40 students. Find the median marks obtained by the student.



9. The following 'more than ogive' shows the weight of 40 students of a class. What is the lower limit of the median class.



10. The median distance of the following data is 46. Find x and y .

Distance (in m)	10-20	20-30	30-40	40-50	50-60	60-70	70-80	Total
No. of Students	12	20	x	65	y	25	18	230

11. Find the mean of the following distribution by (a) Direct Method (ii) Assumed Mean Method (c) Step Deviation Method

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	7	3	13	12	14	9	6	8

12. Find the median of the following distribution

Class	0-8	8-16	16-24	24-32	32-40	40-48	48-56	56-64
Frequency	5	7	2	11	4	8	4	7

13. Find the mode of the following distribution

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	7	3	11	9	17	7	6	8

14. The following frequency distribution shows the marks obtained by 100 students in a school. Find the mode

Marks	Number of Students
Less than 10	10
Less than 20	15
Less than 30	30
Less than 40	50
Less than 50	72
Less than 60	85
Less than 70	90
Less than 80	95
Less than 90	100

15. Draw 'less than' and 'more than' ogives for the following distribution

Marks	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Number of Students	8	12	24	6	10	15	25

Also find median from the graph.

16. The mode of the following distribution is 65. Find the values of x and y , if sum of the frequencies is 50.

Class Interval	0-20	20-40	40-60	60-80	80-100	100-120	120-140
Frequency	6	8	x	12	6	y	3