

## 14. STATISTICS

### 4 MARK QUESTIONS

1. The following table gives the height of trees

Height (Less than)	7	14	21	28	35	42	49	56
Number of trees	26	57	92	134	216	287	341	360

Draw 'less than ogive' and 'more than ogive'. Also, find the median.

2. The mean of the following table is 50. The frequencies  $f_1$  and  $f_2$  in class 20-40 and 60-80 are missing. Find the missing frequencies.

Class	0-20	20-40	40-60	60-80	80-100	Total
Frequency	17	$f_1$	32	$f_2$	19	120

3. During the medical check-up of 35 students of a class, their weight were recorded as follows

Weight (in kg)	Number of students
Less than 38	0
Less than 40	3
Less than 42	5
Less than 44	9
Less than 46	14
Less than 48	28
Less than 50	32
Less than 52	35

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

4. Change the given distribution into 'more than type' distribution and draw its ogive.

Marks obtained	20-25	25-30	30-35	35-40	40-45	45-50
Number of Candidates	3	6	12	9	6	4

5. The mode of the following series is 36. Find the missing ( $x$ ) frequency in it.

Class Interval	Frequency
0-10	8
10-20	10
20-30	$x$
30-40	16
40-50	12
50-60	6
60-70	7

### ANSWERS

1. Median = 31.9

2.  $f_1 = 28$  and  $f_2 = 24$

3. 46.5

4.-

5. 10

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