

**CLASS: X**

**TOPIC: STATISTICS**

1. The median of the following data is 525. Find the values of x and y, if the total frequency is 100 (9, 15)

C.I	0 – 100	100-200	200 - 300	300 – 400	400-500	500-600	600-700	700-800	800-900	900-1000
F	2	5	x	12	17	20	y	9	7	4

2. The median of the data is 28. Find the values of x and y, if the total frequency is 50 (8, 16)

Marks	0 - 10	10 – 20	20 – 30	30 – 40	40 - 50
No of students	5	x	15	y	6

3. If the mean of the following distribution is 27, find the value of p (P = 7)

C. I	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50
F	8	P	12	13	10

4. Find the missing frequency: mean = 50, Total frequency = 120 (28, 24)

x	10	30	50	70	90
f	17	$F_1$	32	$F_2$	19

5. The mean of the following frequency distribution is 132 and the sum of the observations is 50. Find the (10, 8)  
Missing frequencies  $f_1$  and  $f_2$

C. I	0 – 40	40 - 80	80 - 120	120 - 160	160 - 200	200 - 240
F	4	7	$F_1$	12	$F_2$	9

6. Find the mean, median and mode of the following data (30, 30.67, 33.3)

C.I	0 - 10	10 - 20	20 – 30	30 – 40	40 - 50	50 - 60	60 - 70
F	6	8	10	15	5	4	2

7. The mode of the following frequency distribution is 55, find the values of x and y, If the total frequency is 50 (X = 7, Y = 5)

C.I	0 - 15	15 - 30	30 - 45	45 - 60	60 - 75	75 - 90
F	6	7	Y	15	10	X

8. For a given data less than ogive and more than ogive intersect at a point P(x, y). Then what does abscissa of the Point represents

9. Write the empirical relationship between the three measures of central tendency

10. If median = 15 and mean = 16, find mode of the distribution (13)

11. Following is the distribution of marks obtained by 60 students: Calculate the arithmetic mean (26.5)

Marks	More than 0	more than 10	More than 20	More than 30	More than 40	More than 50
No of students	60	56	40	20	10	3

12. From the following data draw the two types of curves and find the median

C. I	200 - 220	220 – 240	240 - 260	260 - 280	280 - 300	300 - 320
F	7	3	6	8	2	4

13. 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

(28.6)

PREPARED BY : MAHABOOB PASHA LX – X BOYS