

Class: X
Subject: Math's
Topic: Statistics
No. of Questions: 20

Q.1 Find the mean of the following distribution:

x_i :	10	30	50	70	89
f_i :	7	8	10	15	10

Q.2 If the mean of the following distribution is 6, find the value of p.

x:	2	4	6	10	p+5
f:	3	2	3	1	2

Q.3 Find the missing frequencies in the following frequency distribution if it is known that the mean of the distribution is 1.46.

Number of accidents(x):	0	1	2	3	4	5	Total
Frequency(f):	46	?	?	25	10	5	200

Q.4 The following table shows the weights of 12 students:

Weight (in Kg):	67	70	72	73	75
Number of students:	4	3	2	2	1

Find the mean weight by shortcut method.

Q.5 Find the mean wage from the following data:

Wage (in Rs.):	800	820	860	900	920	980	1000
No. Of workers:	7	14	19	25	20	10	5

Q.6 The table below gives the distribution of villages under different heights from the sea level in a certain region. Compute the mean height of the region.

Height (in metres):	200	600	1000	1400	1800	2200
No. Of villages:	142	265	560	271	89	16

Q.7 Find the mean of the following frequency distribution:

Class-interval:	0-10	10-20	20-30	30-40	40-50
No. of workers f:	7	10	15	8	10

Q.8 Find the mean of the following frequency distribution: (CBSE-2006)

Classes:	0-20	20-40	40-60	60-80	80-100
Frequency:	15	18	21	29	17

Q.9 If the mean of the following distributions 54, find the value of p: (CBSE-2006)

Class:	0-20	20-40	40-60	60-80	80-100
Frequency:	7	p	10	9	13

Q.10 The mean of the following frequency table is 50. But the frequencies f_1 and f_2 in the class 20-40 and 60-80 are missing. Find the missing frequencies. (CBSE-2006)

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

Q.11 If the median of the distribution given below is 28.5, find the value of x and y.

Class interval:	0-10	10-20	20-30	30-40	40-50	50-60
No. of students:	5	x	20	15	y	5

Q.12 The following table shows the age distribution of cases of a certain disease admitted during a year in a particular hospital:

Age(in years):	5-14	15-24	25-34	35-44	45-54	55-64
No. of cases:	6	11	21	23	14	5

Find the average age for which the maximum cases occurred.

Q.13 The following data gives the distribution of total household expenditure (in rupees) of manual workers in a city:

Expenditure (in Rs.)	Frequency
1000-1500	24
1500-2000	40
2000-2500	33
2500-3000	28
3000-3500	30
3500-4000	22
4000-4500	16
4500-5000	7

Find the average expenditure which is being done by the maximum number of manual workers.

Q.14 For the following grouped frequency distribution find the mode:

Class:	3-6	6-9	9-12	12-15	15-18	18-21	21-24
Frequency:	2	5	10	23	21	12	3

Q.15 Compute the mode for the following frequency distribution:

Size of items:	0-4	4-8	8-12	12-16	16-20	20-24	24-28	28-32	32-36	36-40
Frequency:	5	7	9	17	12	10	6	3	1	0

Q.16 Compute the median for the following cumulative frequency distribution:

Class interval:	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of students (f):	4	12	14	16	20	16	10	8

Q.17 Find the median of the following distribution:

Weekly wages:	60-69	70-79	80-89	90-99	100-109	110-119
No. of workers:	5	15	20	30	20	8

Q.18 Calculate the median of the following frequency distribution:

Class:	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
Frequency:	5	6	15	10	5	4	2	2

Q.19 The frequency distribution of scores obtained by 230 candidates in a medical entrance exam is as follows:

Scores:	400-450	450-500	500-550	550-600	600-650	650-700	700-750	750-800
No. of candidates:	20	35	40	32	24	27	18	24

Draw the cumulative frequency curve by more than method. Also, draw the cumulative frequency polygon.

Q.20 Draw a cumulative frequency curve and cumulative frequency polygon for the following frequency distribution by less than method.

Marks:	0-10	10-20	20-30	30-40	40-50	50-60
No. of students:	7	10	23	51	6	3