

Class XI

Topic: Organization of Data

1. In an examination, 25 students secured the following marks:

23, 28, 30, 32, 35, 35, 36, 40, 41, 43, 44, 45, 45, 48, 49, 52, 53, 54, 56, 56, 58, 61, 62, 65, 68

Arrange these data in the form of frequency distribution using the following class intervals:

20- 29, 30- 39, 40- 49, 50- 59 & 60- 69

2. The following data is of the age of 25 students of class XI. Arrange these data in the form of frequency distribution.

15, 16, 16, 17, 18, 18, 17, 15, 15, 16, 16, 17, 15, 16, 15, 16, 16, 18, 15, 17, 17, 18, 10, 16, 15

3. Students of class XI obtained following marks in Economics. Classify the data in the form of discrete series & continuous series.

15, 15, 18, 16, 20, 21, 25, 25, 15, 16, 18, 22, 24, 25, 20, 18, 22, 24, 24, 25, 25, 23, 20, 15, 16, 17, 19, 18, 22, 22.

4. Arrange the following data in the form of an exclusive frequency distribution, using 5- 10 as the initial class interval:

12, 36, 40, 30, 28, 20, 19, 10, 10, 19, 27, 15, 26, 10, 19, 7, 45, 33, 26, 37, 5, 20, 11, 17, 37, 30, 20.

5. Weight of 20 students is given in kgs. Using class interval of 5, make a frequency distribution:

30	42	26	25	42	33	15	35
45	45	45	39	42	40	18	35
41	20	36	48				

6. Construct a discrete frequency distribution with the help of following data:

10	15	14	11	13	15	12	14
16	11	12	11	10	11	10	12
11	12	13	12	15	12	13	12
14	13	14	12	16	13		

7. On the basis of following data construct a continuous frequency distribution with difference of 5 (Exclusive Method):

13	10	12	18	20	25	34	17
11	16	21	23	14	15	25	30
33	27	17	19	26	29	27	28

8. With the help of following data construct a frequency distribution with a difference of 10 (Inclusive Method)

10	24	19	20	48	36	16	24
31	42	29	39	40	49	30	21
27	37	44	13	17	24	31	46
56	57	59	31	34	52		

9. Monthly wages received by 50 laborers are given below. Tabulate the data in classes with class intervals of five rupees each:

61	54	40	60	48	64	63	68
62	61	44	51	48	51	55	56
48	47	51	61	53	62	54	66
50	50	41	52	66	69	49	42
59	63	69	46	50	49	54	56
62	54	69	53	68	53	46	51
49	52						

10. Convert the following data in a simple frequency distribution:

5 students obtained less than 3 marks
12 students obtained less than 6 marks
25 students obtained less than 9 marks
33 students obtained less than 12 marks

11. An economic survey revealed that 30 families in a town incur following expenditure in a day (rupees).

11, 12, 14, 16, 16, 17, 18, 18, 20, 20, 20, 21, 21, 22, 22, 23, 24, 25, 25, 26, 27, 28, 28, 31, 32, 32, 33, 36, 38.

(a). Convert these data in the form of frequency distribution, using the following class intervals.

10- 14, 15- 19, 20- 24, 25- 29, 30- 34 & 35- 39

(b). How many families spend more than 29 rupees a day?

12. Convert the following 'simple frequency series' into 'cumulative frequency series':

Class Intervals	Simple Frequency
0- 5	10
5- 10	15
10-15	25
15-20	30
20-25	10

13. Convert the following frequency series into simple frequency series.

(1)	(2)
Value	Value
Cum. Frequency	Cum. Frequency
Below 10	More than 0
Below 20	More than 10
Below 30	More than 20
Below 40	More than 30
Below 50	More than 40

14. Convert the following 'inclusive series' into 'exclusive series':

Monthly Wages	No. of Workers
100- 109	7
110- 119	15
120- 129	25
130- 139	16
140- 149	11