

Chapter 4: Organisation of Data

Question 1: Convert the following cumulative frequency series into a simple frequency series:

- 4 students obtained less than 10 marks
- 20 students obtained less than 20 marks
- 40 students obtained less than 30 marks
- 48 students obtained less than 40 marks
- 50 students obtained less than 50 marks

Solution: Conversion of Cumulative Frequency Series into a Simple Frequency Series

Cumulative Frequency Series		Simple Frequency Series	
Marks less than	Number of students	Marks	Number of students
10	4	0-10	4
20	20	10-20	$20-4 = 16$
30	40	20-30	$40-20 = 20$
40	48	30-40	$48-40 = 8$
50	50	40-50	$50-48 = 2$

Question 2: In a survey, it was found that 50 families bought milk in the following quantities in a particular month. Classify the following data in an individual, discrete, continuous and cumulative frequency series.

19	25	12	21	20
11	7	9	11	14
20	15	22	15	17
10	23	18	11	19
25	22	5	18	17
11	6	21	24	26
8	5	9	20	23
16	22	22	23	13
16	11	16	22	17
23	22	10	7	21

Solution:

1. Individual series: In the ascending order of the items

5	11	16	20	22

5	11	16	20	22
6	11	16	20	23
7	11	17	21	23
7	11	17	21	23
8	12	17	21	23
9	13	18	22	24
9	14	18	22	25
10	15	19	22	25
10	15	19	22	26

2. Discrete Series: In the ascending order of the items

Quantity of Milk	Tally Bars	Frequency	Quantity of Milk	Tally Bars	Frequency
5	II				
6	I				
7	II				
8					
9					
10					
11					
12					
13					
14					
15					