Chapter 1 – Organisation of Data

Question 1

Mentioned below are the marks acquired by 40 employees during their assessment. Arrange the marks in ascending and descending order.

10	15	18	15	9	6	5	3	9	6
22	15	12	20	1	5	6	4	10	3
21	12	11	19	3	10	10	26	19	10
10	17	28	22	5	21	17	8	9	11

Answer:

Marks in Ascending Order:

1,3,3,3,4,5,5,5,6,6,6,8,8,9,9,10,10,10,10,10,10,11,11,12,12,15,15,15,17,17,18,19, 19,20,21,21,22,22,26,28

Marks in Descending Order:

28,26,22,22,21,21,20,19,19,18,17,17,15,15,15,12,12,11,11,10,10,10,10,10,10,9,9, 8,8,6,6,6,5,5,5,4,3,3,3,1

Question 2

Students height in inches for 35 students are given below. Arrange the following data in an individual frequency sequence.

60	72	68	68	58	55	50	72	55	50	66	66
62	55	66	66	58	72	72	60	55	60	55	58
60	66	72	72	60	68	55	58	65	60	68	55

Answer:

In the form of frequency distribution, the given data can be arranged as follows.

Heights (in inches)	Marks	Frequency
50	II	2
55	$\cancel{IIII}\,II$	7
58	$IIII$	4
60	$\cancel{IIII}\,I$	6
62	I	1
65	I	1
66	$\cancel{IIII}$	5
68	$IIII$	4

72	ԷԷ̶Լ̶Ⅰ	6
		Σf = 36

Question 3

Find out the missing class interval.

Class-Interval	Below 20	20−50	50−90	90−140	More than 140
Frequency	8	11	15	3	5

Answer:

In the above-mentioned question, the class interval has a different width. Therefore, the missing class interval cannot be established.

Question 4

Transfer given below cumulative frequency series to simple frequency series.

Marks	No. of Students
Less than 10	12
Less than 30	19
Less than 50	26
Less than 70	48
Less than 90	57

Answer:

The cumulative frequency 'less than' is displayed in 'simple frequency distribution' form.

Class-Interval	Frequency
0 – 10	10
10 – 30	19 − 12 = 7
30 – 50	26 − 19 = 7
50 – 70	48 − 26 = 22
70 – 90	55 − 45 = 10

Question 5

From the following data, arrange a frequency distribution table with classes 10-20, 20-30, etc.

25	10	12	26	10	32	36	31	41	55
22	31	36	38	25	11	12	25	42	48

| 47 | 37 | 45 | 54 | 42 | 35 | 37 | 32 | 65 | 75 |

Answer:

In the form of frequency distribution, the given data can be arranged as follows.

*Class Interval	Tally Marks	Frequency
10-20	卌	5
20-30	卌	5
30-40	卌 卌	10
40-50	卌I	6
50-60	II	2
60-70	I	1
70-80	I	1
		Σf = 30