

AI1110 ASSIGNMENT-3

DASARI SRINITH (CS21BTECH11015)

Abstract—This document contains the solution for Assignment 3 (NCERT GRADE 9 Exercise 14.2 Q.2)

EXERCISE 14.2

Question 2:

The distance (in km) of 40 engineers from their residence to their place of work were found as follows:

5	3	10	20	25	11	13	7	12	31
19	10	12	17	18	11	32	17	16	2
7	9	7	8	3	5	12	15	18	3
12	14	2	9	6	15	15	7	6	12

TABLE I

Construct a grouped frequency distribution table with class size 5 for the data given above taking the first interval as 0-5 (5 not included). What main features do you observe from this tabular representation?

Solution:

As we are required to construct a grouped frequency distribution table with class size 5 and taking the first interval as 0-5 (5 not included), the classes are 0-5, 5-10, 10-15, 15-20 and so on.

The data represented in the grouped distribution table will be as :

Distance (in Km)	Tally Marks	Frequency
0 - 5		5
5 - 10		11
10 - 15		11
15 - 20		9
20 - 25		1
25 - 30		1
30 - 35		2
Total		40

TABLE II

FREQUENCY DISTRIBUTION TABLE

- 2) This is called a "Grouped Frequency Distribution table".
- 3) We observe that the classes in the table above are non-overlapping.
- 4) We also observe that the number of houses of the engineers whose distance from work place is less than 20 km are

$$5 + 11 + 11 + 9 = 36 \quad (1)$$

i.e, 36 houses.

- 1) Presenting data in this form simplifies and condenses data and enable us to observe certain important features at glance .