

Assignment 3

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Abstract—This document contains the solution for Assignment 3 (NCERT Class 9 Exercise 15.1 Q.12)

Q 12 In Q.5, Exercise 14.2, you were asked to prepare a frequency distribution table, regarding the concentration of Sulphur dioxide in the air in parts per million of a certain city for 30 days. Using this table, find the probability of the concentration of Sulphur dioxide in the interval 0.12–0.16 on any of these days.

Solution:

The frequency distribution table which we obtained on solving Q14 of exercise 14.2 is given below:

Conc. of sulphur dioxide (ppm)	Frequency
0.00-0.04	4
0.04-0.08	9
0.08-0.12	9
0.12-0.16	2
0.16-0.20	4
0.20-0.24	2
Total	30

From the frequency distribution table we observe that:

No. of days during which the concentration of Sulphur dioxide lies in interval 0.12–0.16 = 2

Total no. of days during which concentration of Sulphur dioxide recorded = 30

$$\text{Therefore, Required Probability} = \frac{2}{30} = \frac{1}{15}$$