

Class – XI

Lesson Plan

TOPIC: STATISTICS

Brief Description: In this chapter, we will teach students about Measures of Dispersion, Range, Mean Deviation, Variance and Standard Deviation, Analysis of Frequency Distributions.

UN Sustainable Goals to be achieved (if any): Quality Education

Objectives: (put Bloom's level)

I - Specific Objectives

Students will be able to understand:

- ❖ Measures of Dispersion
- ❖ Range
- ❖ Mean Deviation
- ❖ Variance and Standard Deviation
- ❖ Coefficient of variation
- ❖ Analysis of Frequency Distributions

II - Behavioral Objectives

After learning this chapter students will be able to:

1. Interpretate and analyze the data
2. Understand the Effectiveness of data

Process / Activities:

Activity (to introduce the lesson)

PPT/Video will be shown to students based on some real life situations like run rate, exam results etc.

Skills (as per subject)

- ❖ Observation
- ❖ Understanding
- ❖ Problem solving

Exercise for Notebook (put Bloom's level)

- ❖ Glossary
- ❖ R.T.C (Reference to Context)
- ❖ Typology of questions
- ❖ Value based question

Expected Learning Outcomes

Students would be able to learn:

- ❖ Measures of Dispersion
- ❖ Range
- ❖ Mean Deviation
- ❖ Variance and Standard Deviation
- ❖ Coefficient of variation
- ❖ Analysis of Frequency Distributions
- ❖ Data collection
- ❖ Handling large amount

Assessment: (put Bloom's level)

Q1. Find the sum of deviation about the mean for the following data: (PS)

6, 7, 10, 12, 13, 4, 8, 12

Q2. Find the mean deviation about the mean for the following data: (US)

12, 3, 18, 17, 4, 9, 17, 19, 20, 15, 8, 17, 2, 3, 16

Q3. Find the mean deviation about the median for the following data (MS)

Xi	3	6	9	12	13	15	21	22
Fi	3	4	5	2	4	5	4	3

Q4. Calculate the mean, variance and standard deviation for the following distribution: (R)

Class	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80	80 – 90	90 – 100
Frequency	3	7	12	15	8	3	2

Q5. An analysis of monthly wages paid to workers in two firms A and B, belonging to the same industry, gives the following results: (AEL)

	Firm A	Firm B
Number of Wages	586	648
Mean of Monthly Wages	Rs. 5253	Rs. 5253
Variance of the distribution	100	121

- (i) Which firm A or B pays larger amount as monthly wages?
- (ii) Which firm, A or B, shows greater variability in individual wages?