

## PRACTICE CASE WORKSHEET - II

**Topic:** Correlation & Regression Analysis (MS-Excel)

**Case Title:** Effect of Training Hours and Experience on Employee Performance

**Case Background :** An HR manager in an IT services company wants to understand how **Training Hours** and **Years of Experience** influence **Employee Performance**. Data collected from 15 employees is analyzed using **Correlation and Regression Analysis in MS-Excel** to support HR decision-making.

Employee ID	Training Hours	Experience (Years)	Performance Score
E01	10	1	62
E02	12	2	65
E03	15	2	68
E04	18	3	72
E05	20	4	75
E06	22	5	78
E07	25	6	82
E08	27	7	85
E09	30	8	88
E10	28	7	86
E11	26	6	84
E12	24	5	81
E13	21	4	77
E14	17	3	70
E15	14	2	66

### A) CORRELATION ANALYSIS (Data Analysis ToolPak)

**Objective:** To measure the **strength and direction of relationship** between:

- Training Hours & Performance Score & Experience & Performance Score

#### Steps in Excel

1. Go to **Data** → **Data Analysis** → **Correlation**
2. Select input range (**Training Hours, Experience, Performance Score**)
3. Choose **Columns**, tick **Labels**
4. Output in a **new worksheet**

#### Practice Questions

1. What is the correlation between **Training Hours and Performance Score**?
2. Is the relationship positive or negative?
3. Which variable has a stronger relationship with **Performance Score**?

### B) REGRESSION ANALYSIS (Data Analysis ToolPak)

**Objective:** To examine how **Training Hours** and **Experience** affect **Employee Performance**.

#### Steps in Excel

1. Go to **Data** → **Data Analysis** → **Regression**
2. **Input Y Range** → **Performance Score**
3. **Input X Range** → **Training Hours & Experience**
4. Tick **Labels**
5. Select **Confidence Level = 95%**
6. Output in a **new worksheet**

#### Practice Questions

1. Write the **regression equation** from the output.
2. What does **R-square** indicate in this case?
3. Which variable has more impact on **Employee Performance**? Why?