Course Title:	**Basic Statistics**
Course Code:	**SEL MI102**
Course Coordinator	**Dr. Meenakshi Gupta**
Credits	**3-1-0**

Evaluation Scheme Total 100 Marks

Quiz (Total 20 Marks)				Assignment/Project (Total 20 marks) (Minimum Two Assignments or one Project)		Mid-Term	Major Examination	Total
Quiz I (5 marks	Quiz II (5 marks)	Quiz III (5 marks)	Quiz IV (5 marks)			20 marks) (1 ½ Hour Duration)	(40 marks) (3 Hour Duration	100 Marks

WEEKS	TOPICS TO BE COVERED
Week 1	Definition, Scope, Subject matter, Importance and Limitations of Statistics; Basic concepts
Week 2	Classification and Tabulation of the data
Week 3	Diagrammatic and Graphical representation of Data- Frequency polygon, Ogives and Pie Diagram, Histograms etc.
Week 4	Measures of Central tendency- Arithmetic Mean, Geometric Mean and Harmonic Mean-Weighted Mean,
Week 5	Median, Quartiles, Octiles, Deciles, Percentiles, Mode Comparison of different measures of central tendency
Week 6	Difference between Measures of central tendency and measures of Dispersion; Absolute and Relative measures of Range; Quartile Deviation
Week 7	Mean Deviation from, mean, median and mode; Standard Deviation, Variance and coefficient of variation
Week 8	Comparison of Different Measures of Dispersion, Skewness
Week 9	Kurtosis
Week 10	Moments
Week 11 (17th -21st March 2025)	**Mid-Term**

2nd April, 2025	**Showing of Mid-Term Answer Sheets**
Week 13	Correlation-Meaning, Types and Degrees of Correlation- Methods of Measuring Correlation: Scatter Diagram and Correlation Graph
Week 14	Algebraic Methods: Karl Pearson's Coefficient of Correlation and Rank Correlation Coefficient - Properties and Interpretation of Correlation Coefficient
Week 15	Simple linear regression-Meaning, Principle of Ordinary Least Squares and Regression Lines
Week 16	Measurement of Trend by Moving Average and the Method of Least Squares
Week 17 (5th -9th May 2025)	**Revision Week**
Week 18 (13th – 22nd May 2025)	**Major Examinations**
29th May 2025	**Showing of Major Exams Answer Sheets**

Course Outcomes: After successful completion of this course, students shall be able to

CO1: Understand basic concepts of Statistics: measures of central tendency, dispersion, correlation and regression
CO2: Apply statistical concepts (central tendency, dispersion, correlation and regression) to analyse the data

CO3: Develop the ability to construct basic statistical model.

Recommended Books:

1. Croxton and Dudley "Applied General Statistics", (Latest Edition).
2. Gupta S. P. "Statistical Methods", Sultan Chand & Sons, N. Delhi (Latest Edition).
3. Hooda, R. "Statistics for Business and Economics", Macmillan, ND (Latest Edition).
4. Jay L. Devore, Probability and Statistics for Engineers, Cengage Learning.
5. RichardJ.Larsen and MorrisL.Marx, An Introduction to Mathematical Statistics and its Applications, Prentice Hall.

Calendar of Quizzes/Assignment etc. to be provided as per below details and exact dates to be fixed in consultation with other course coordinators to avoid overlap of Quizzes of different courses.

Component	**Date**
Quiz-I	**27th -31st, January 2025**
Quiz-II	**24th -28th February, 2025**
Assignment-I	**10th -12th February, 2025**
Mid-Term	**17-21st March, 2025**

Assignment-II/ **Project Submission**	**21st – 24th April, 2025**
Quiz-III	**7th – 11th April, 2025**
Quiz-IV	**28th April-2nd, May, 2025**
Major Exam	**13th – 22nd May, 2025**

Note:

1. **One surprise Quiz may be fixed out of Quiz-II, Quiz-III or Quiz-IV.**
2. **In case of any deviation in evaluation methodology for courses such as AEC/VAC/SEC shall be mentioned accordingly. Thus, same shall be approved by the next BOS of school if not done earlier.**

Signature of Course Coordinator :