The Syllabus of Research Methodology

1. **Required (Compulsory) Topics**

   - **Overview of Research:**
     Meaning, purpose, significance of ethical conduct in research, Classification of Research based on its purpose (Basic, Applied, Evaluation and Action Research)

   - **Scientific Thinking:**
     Types of reasoning, Critical Thinking, Importance of existing knowledgebase (research literature)

   - **Elements of Research:**
     Concepts, Constructs, Definitions – Theoretical and Operational, Theory, Literature Review and its importance, Models, research questions and objectives, research design and methodology.

2. **Topics with a Choice (Elective)**

   - **Quantitative Research Methods:**
     Variables, Conjecture, Hypothesis, Measurement, Types of data and scales, Sample, Sampling techniques, Probability, Probability Distributions, Hypothesis Testing, Level of Significance and Confidence Interval, t-test, ANOVA, Correlation, Regression Analysis

   OR

   - **Qualitative Research Method:**
     Types of approaches – Narrative, phenomenological, grounded theory, ethnographic, case study, Data Sources: Interviews, Focus groups, observations, approaches to analysis of qualitative data –coding, content analysis