

Syllabus for Ph.D Course Work in Commerce and Management Studies

Course: Research Methodology

Module I – Introduction:- Significance of Research in Commerce and Management – Types of Research – Pure and Applied Research – Exploratory and Experimental Research – Descriptive and Analytical Research – Quantitative & Qualitative Research.

Module II – Research Process:- Identification of Research Problem – Literature Review – Research Design – Hypotheses.

Module III – Sampling:- Methods of Sampling :- Probability and non-Probability Sampling methods – Data Collection – Methods of Collection of Primary Data – Interview Schedule – Questionnaire- Observation – Survey – Case Study.

Module IV – Analysis of Data and Report Writing:- Editing – Classification – Coding and Tabulation – Report Writing – Contents of Research Report – Bibliography – Appendices

Module V – Quantitative Techniques for Research :- Parametric Tests – F Ratio – One Way ANOVA – Two Way ANOVA – problems – Non Parametric Tests – Chi-Square Test – Sign Test – Wilcoxon Signed Test – Mann-Whitney U Test – Kruskal Wallis H Test - Kolmogrov-Smirnov Test.

Selected Readings:-

1. Methodology of research in Social Science – O.R.Krishna Swami
2. Research methodology – C.K. Kothari.
3. Research Methodology-Suresh Gupta
4. New Methods in Social Science Research-Allen.T.Harrell.
5. Research methodology in Social Science – C.R.Reddy.
6. Scientific Social Surveys and Research – Young P.V
7. Statistical Methods – S.P.Gupta.
8. Business Statistics – G.C.Beri.
9. Statistics for Management – Richard I.Levin & Davis. S.Rubin.

Ph.D PRELIMINARY QUALIFYING EXAMINATION

(Course Work)

Commerce

Paper I – Research Methodology

Time: Three Hours

Maximum: 70 Marks

Section A

Answer **four** questions.
Each question carries 5 marks

1. What is causal research?
2. Compare and contrast between Pure and Applied Research.
3. What do you mean by footnotes? Explain.
4. Enumerate the problems faced by the enumerators while collecting data.
5. What is interview schedule? Explain.
6. When can you conduct Mann Whitney U test? Explain. (4x5=20 marks)

Section B

Answer any **five** questions.
Each question carries 10 marks

7. Explain descriptive and analytical research with examples.
8. How would you identify the research problem? Explain.
9. What is hypothesis testing? Explain.
10. Compare and contrast primary and secondary data.
11. Explain multi stage cluster sampling with an example.
12. Discuss the use of case study in research.
13. Explain Kolmogorov smirnov test with an example.
14. A firm wishes to compare four programs for training workers to perform a certain manual task. Twenty new employees are randomly assigned to the training programs, with 5 in each program, At the end of the training period, a test is conducted to see how quickly trainees can perform the

taks. The number of times the task is performed per minute is recorded for each trainee, with the following results:-

Program 1: 9, 12, 14, 11, 13

Program 2: 10, 6, 9, 9, 10

Program 3: 12, 14, 11, 13, 11

Program 4: 9, 8, 11, 7, 8

(a) Construct the ANOVA table

(b) Using $\alpha = .05$, determine whether the treatments differ in their effectiveness.

(5x10=50 marks)