Faculty of Commerce

Aligarh Muslim University, Aligarh Syllabus for Ph.D. Admission Test 2022-23 onwards Section-A

Research Aptitude/ Research Methodology

Research: Meaning, Objective, Characteristics, Types and Nature of Research, Literature Review; Process of Research, Research an aid to Decision Making and Research in Functional Areas. Qualities of a Competent Researcher, Criteria for the selection of a research problem, Research proposal.

Research Design, Source of Information and Collection of Data, Preparation of Schedule and questionnaire, Data Processing and univariate analysis, Sampling and Sample Design, Scaling technique, Sampling & Non-sampling errors, Sample size, Sampling Methods: Probabilistic & Non-probabilistic sampling, Sampling Frame.

Probability Distributions: Binomial, Poisson & Normal distribution, Concept, Nature and formulation of Hypothesis, Procedure for testing the hypothesis, Null hypothesis and alternative hypothesis, Limitations and uses of testing the hypothesis.

Correlation and Regression: Meaning and types of Correlation, Karl Pearson's Coefficient of Correlation, Sample Regression analysis.

Parametric Test: t-test, Z-test, One way ANOVA, Two day ANOVA.

Non-Parametric Test: Chi square test, sign test, run test, Spearman's Rank Correlation test, Mann- Whitney U-test, Kruskal-Wallis H-test, Median test.

Research Ethics & Thesis Writing: Its characteristics benefits, considerations and format; Paper, Article, Workshop, Seminar, Conference and symposium.