

Entrance Test for Research Programmes of IMU

- Research Methodology Syllabus -- Weightage 50%

S.N	Topics	Percentage of Questions
1.	<u>Meaning of Research:</u> Objectives of Research, Types of Research, Research Process, Problem Statement, Research Design, Approaches to Research-Quantitative, Qualitative Approach, Exploratory, Confirmatory Research, Experimental and Theoretical Research.	About 15 % Questions
2.	<u>Problem Formulation:</u> Conducting Literature Review, Information Sources (Books, monographs, reviews, blogs, etc.), Information Retrieval, Role of libraries in Information Retrieval, Tools for identifying literature (digital resources and print media), Indexing and abstracting services, Citation indexes, Summarising the Review, Critical Review, Identifying Research Gap, Conceptualising and Hypothesising the research gap.	About 10 % Questions
3.	<u>Research Design:</u> Experimental / Simulation/ Theoretical /Empirical Research, Cause effect relationship, Development of Hypothesis, Measurement Systems Analysis, Validity and Reliability, Statistical Design of Experiments, Field Experiments, Data/Variable Types & Classification, Data collection - Methods and Tools.	About 15 % Questions
4.	<u>Data Analysis and Interpretation:</u> Sampling, Sampling Error, Statistical Methods/Tools - Measures of Central Tendency and Variation, Test of Hypothesis- z test, t test, F test, ANOVA, Chi square, correlation and regression analysis, Error Estimation.	About 5 % Questions
5.	<u>Writing Research Articles and Thesis:</u> Data Presentation- Types of tables and illustrations, Guidelines for writing the abstract, introduction, methodology, results and discussion, conclusion sections of a manuscript. References – Styles and methods, Citation and listing system of documents. Plagiarism. Ethical considerations in Research.	About 5 % Questions
Total Weightage		50%