DEPARTMENT OF MANAGEMENT STUDIES SCHOOL OF MANAGEMENT Ph.D. Programme in Management

Common Syllabus for Ph.D. Part - I Examination

Paper - 1 Research Methodology

Part - I

Unit – I

Introduction to research, research types - Overview of Research Process - Qualitative Research Studies and designs - Theory Building - Hermeneutics, Phenomenology and Action Research - Grounded Theory.

Unit – II

Research Plan and design - Formulating a Research Problem, research questions -Plan for data analysis - Design of Instruments -Measurement and Scaling Techniques.

Unit - III

Tools of qualitative data Collection: primary, and secondary; observation depth Interview, focus group discussion - Use of projective Techniques - Interviewing and moderation skills in qualitative Data Collection - Selecting Method of Data Collection - Data editing, processing & categorization.

Unit - IV

Introduction to data analysis: quantitative - Traditional qualitative Data analysis – e.g. Content Analysis and Interpretation - Integration of qualitative and quantitative data analysis - Consumer Insight Mining (CIM) using Traditional and Non-traditional Methods (Narrative, Rhetorical, Text Analysis and Metaphor, Obituary, NLP)

Unit – V

Application of software tools, use of library databases, review of articles, exploring various data sources, understanding bibliography, structuring of a thesis/report, use of different referencing styles e.g. APA, Report Writing, presentations, and Research Proposal.

Part - II

Unit – I

Basic statistics, probability, probability distributions, expectation, distributions-discrete, and continuous, parametric and non-parametric, sampling, sampling distribution, sampling methods, sample size determination, sampling errors, theory of estimation, correlation, simple regression model.

Unit – II

Classical Linear Regression Models (CLRM), Generalized Regression Models and Issues Related Assumptions of Normal CLRM (heteroscedasticity, autocorrelation, multi- collinearity, structural stability, etc.), errors in variables, dummy variable regression analysis (probit / tobit / logit etc), non-linear regression models.

Unit – III

Design of experiments, Repeated Design of Experiments, Discriminate Analysis

Unit – IV

Introduction to multivariate Analysis, Factor Analysis, Cluster Analysis, Multi-dimensional Scaling Techniques (MDS), conjoint Analysis.

Unit - V

Structural Equation Modeling (SEM): Introduction to simultaneous equations-concept of structured form and reduced form-problem of identification, 2-stage least squares, Discrete Variable Analysis, Introduction to time series, Panel Data Model and Analysis.

Paper 2 - Research & Publication Ethics

Course Title: Research and Publication Ethics (RPE)-Course for awareness about the publication ethics and publication misconducts.

Course Level: 2 Credit course (30 hrs.)

Eligibility: M.Phil., Ph.D. students and interested faculty members (It will be made available to post graduate students at later date)

Fees: As per University Rules

Faculty: Interdisciplinary Studies

Qualifications of faculty members of the course: Ph.D. in relevant subject areas having more than 10 years of teaching experience

About the course

Course Code: CPE - RPE Overview: This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.) and plagiarism tools will be introduced in this course.

Pedagogy: Class room teaching, guest lectures, group discussions, and practical sessions.

Evaluation: Continuous assessment will be done through tutorials, assignments, quizzes, and group discussions. Weightage will be given for active participation. Final written examination will be conducted at the end of the course.

Course structure: The course comprises of six modules listed in table below. Each module has 4-5 units.

Modules	Unit title	Teaching hours
Theory		
RPE 01	Philosophy and ethics	4
RPE 02	Scientific Conduct	4
RPE 03	Publication ethics	7
Practice		
RPE 04	Open access publishing	4
RPE 05	Publication misconduct	4
RPE 06	Database and research metrics	7
	Total	30

Syllabus in detail

THEORY

• RPE 01: PHILOSOPHY AND ETHICS (3 hrs.)

- 1. Introduction to philosophy: definition, nature and scope, concept, branches
- 2. Ethics: definition, moral philosophy, nature of moral judgements and reactions

• RPE 02: SCIENTIFIC CONDUCT (5 hrs.)

- 1. Ethics with respect to science and research
- 2. Intellectual honesty and research integrity
- 3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
- 4. Redundant publications: duplicate and overlapping publications, salami slicing
- 5. Selective reporting and misrepresentation of data

• RPE 03: PUBLICATION ETHICS (7 hrs.)

- 1. Publication ethics: definition, introduction and importance
- 2. Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
- 3. Conflicts of interest
- 4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
- 5. Violation of publication ethics, authorship and contributorship
- 6. Identification of publication misconduct, complaints and appeals
- 7. Predatory publishers and journals

PRACTICE

• RPE 04: OPEN ACCESS PUBLISHING (4 hrs.)

- 1. Open access publications and initiatives
- 2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
- 3. Software tool to identify predatory publications developed by SPPU
- 4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

• RPE 05: PUBLICATION MISCONDUCT (4hrs.)

A. Group Discussions (2 hrs.)

- 1. Subject specific ethical issues, FFP, authorship
- 2. Conflicts of interest
- 3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs.)

Use of plagiarism software like Turnitin, Urkund and other open source software tools

• RPE 06: DATABASES AND RESEARCH METRICS (7hrs.)

A. Databases (4 hrs.)

- 1. Indexing databases
- 2. Citation databases: Web of Science, Scopus, etc.

B. Research Metrics (3 hrs.)

- 1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, CiteScore
- 2. Metrics: h-index, g index, i10 index, altmetrics
