

Ph.D. COURSE WORK (MANAGEMENT)

SCHEME OF EXAMINATIONS FROM THE ACADEMIC SESSION 2017

Program Specific Outcomes

- PSO1. Scholars would be able to demonstrate the ability to acquire skills to perform independent advanced research.
- PSO2. Demonstrate ability to identify and seek out resources and information; apply these to guide research plan development.
- PSO3. Demonstrate the ability to master and/or innovate research methodologies, and techniques.
- PSO4. Scholars would be able to make an original and substantial contribution to the knowledge.
- PSO5. Demonstrate independent thinking and creativity.
- PSO6. Develop and execute original research plan(s).
- PSO7. Ability to generate publishable advances in the field of public policy and corporate world.
- PSO8. PhD graduates would be successful entrepreneurs as well.

Course code	Name of paper	Written Examination	Internal Assessment	Total	Credits (L+T+P)
17IMSPC1	Research Methodology	80	20	100	4+0+0
17IMSPC2	Quantitative Techniques and Computer Applications	80	20	100	4+0+0
17IMSPC3	Data sources for Literature Review	-	25x4=100	100	0+2+2

1. Written examinations in the papers Research Methodology (17IMSPC1) & Quantitative Techniques & Computer Applications (17IMSPC2) of 80 marks each shall be held at the term end of the course. The question paper in each subject shall be set by an examiner to be appointed by the Chairman, P.G.B.O.S. in Management based on the syllabus prescribed.
2. Internal assessment in each of the papers Research Methodology (17IMSPC1) & Quantitative Techniques & Computer Applications (17IMSPC2) shall be awarded by the teacher concerned out of 20 marks as prescribed under ordinance by the Maharshi Dayanand University Rohtak for various P.G Programmes.
3. In paper Data sources for Literature Review (17IMSPC3), each scholar will be required to submit 'Unit Report' citing details of work done concerned with each unit (25 marks for each unit). The scholar will be required to study the resources, methodology, features and literature mentioned in syllabus on the allotted topic/area and prepare a comprehensive unit report which will be submitted to the Supervisor on the scheduled date to be decided by the Supervisor.
4. Each student in the Pre Ph.D. course work shall be assigned to a teacher on the basis of specialization/interest area with teacher's consent.
5. The qualifying marks in the each paper of the course shall be 50%.

RESEARCH METHODOLOGY

Paper Code: 17IMSPC1

Max. Marks: 80

Internal Assessment: 20

Time: 3Hours

Learning Outcomes:

- CSO1. Students would understand a general definition of research design.
- CSO2. Students would know why academic research is undertaken, and the audiences that profit from research studies.
- CSO3. Students would be able to identify the overall process of designing a research study from its inception to its report.
- CSO4. Students would be familiar with ethical issues in academic research, including those issues that arise in using quantitative and qualitative research.
- CSO5. Students would know the primary characteristics of quantitative research and qualitative research.

Unit - I

Meaning, types and significance of research in business; characteristics of good research; identification and formulation of research problems; setting research objectives; hypothesis: meaning, types, need and formulation; importance and format of review of literature.

Unit - II

Business research design: exploratory, descriptive & causal studies; population & sample; sample size; meaning and types of sampling; sampling error; the research proposal.

Unit - III

Measurement & scaling techniques: nominal scale, ordinal scale, interval scale, rating scale; criteria for good measurement; attitude measurement—Likert's scale, Semantic Differential scale, Thurston-equal appearing interval scale, Multi Dimensional scaling; meaning and types of data; data collection methods - observation, survey and interview; questionnaire design; reliability and validity of questionnaire.

Unit - IV

Editing, coding, classification and tabulation of data. Methods of data presentation; interpretation of results; report writing—purpose, steps and format of research report; final presentation of the research report; idea of referencing, bibliography, footnotes and end notes.

Note:

Instructions for External Examiner:

1. The question paper shall be divided in two sections. Section 'A' shall comprise of eight short answer type questions from whole of the syllabus carrying two marks each, which shall be compulsory. Answer to each question should not exceed 50 words normally.
2. Section 'B' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions selecting one question from each unit.
3. All questions will carry equal marks.

Suggested Readings:

1. Donald Cooper and Pamela Schindler, Business Research Methods, Tata McGraw Hill.
2. Gilbert A. Churchill and Dawn Lacobucci, Marketing Research: Methodological Foundations, South Western Educational Publishing.
3. McBurney and Donald H, Research Methods, Wadsworth Publishing.
4. Wilkinson & Bhandarkar: Methodology and Techniques of Social Research.
5. Pauline Vyoung: Scientific Social Surveys and Research.
6. Panneerselvam, R., Research Methodology, Prentice Hall Of India, New Delhi, 2004.

QUANTITATIVE TECHNIQUES AND COMPUTER APPLICATIONS

Paper Code: 17IMSPC2

Max. Marks: 80
Internal Assessment: 20
Time: 3 Hours

Learning Outcomes:

On successful completion of this course students will be able to:

- CSO1. Explain and discuss the researcher's work (model).
- CSO2. Elucidate basic statistical concepts and tests used in academic research and use statistics programs.
- CSO3. Demonstrate their competence and confidence in using inferential statistics in general and to the use of significance testing in particular.
- CSO4. Understand and master the handling of data and employ proper analyses.
- CSO5. Use output derived from statistical procedures and convert such output to understandable statements.

Unit-I

Hypothesis testing; parametric tests: t-test, z-test and F-test; non-parametric tests: Run test, Median test, Sign-test, Wilcoxon matched pairs-test, Mann-Whitney U-test, Kruskal-Wallis test, Friedman-test and Wald-Wolfowitz number of run test.

Unit-II

Types of statistical analysis: bi-variate analysis (Chi-square only) and multivariate analysis—factor analysis, Discriminant analysis, Cluster analysis, MANOVA, Structural Equation Modeling, and Conjoint analysis.

Unit-III

Regression analysis—assumptions of classical normal linear regression model (CNLRM); simple and multiple regression analysis; dummy variable regression models; violations of assumptions of CNLRM—consequences, detection and remedial measures; basic concepts of time series analysis: stationarity, unit roots, co-integration, Granger causality and error correction model.

Unit-IV

Introduction - Introduction to SPSS - Data analysis with SPSS: general aspects, workflow, critical issues - SPSS: general description, functions, menus, commands - SPSS file management. Input and data cleaning - Defining variables - Manual input of data - Automated input of data and file import.
Data manipulation - Data Transformation - Syntax files and scripts - Output management.
Descriptive analysis of data - Frequencies - Descriptives - Explore - Crosstabs - Charts.
Statistical tests - Means - T-test - One-way ANOVA - Non parametric tests - Normality tests.
Correlation and regression - Linear correlation and regression - Multiple regression (linear).
Multivariate analysis - Factor analysis - Cluster analysis.

Note:

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2. Section 'B' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions selecting one question from each unit.
3. All questions will carry equal marks.

Suggested Readings:

1. Malhotra Naresh K., Marketing Research: An Applied Orientation, Pearson Education India.
2. Donald Cooper and Pamela Schindler, *Business Research Methods*, Tata McGraw Hill.
3. Gujarati D N and Sangeetha, *Basic Econometrics*, Tata McGraw Hill.
4. Hair, Black, Babin, Anderson and Tatham, *Multivariate Data Analysis*, Pearson.
5. Levin & Rubin, *Statistics for Business*, Prentice Hall of India, N. Delhi.
6. Gupta S.P. & Gupta M.P. *Business Statistics*, Sultan Chand & Sons, Delhi.
7. Anderson, *Quantitative Methods in Business*, Thomson Learning, Bombay.
8. Anderson, *Statistics for Business & Economics*, Thomson Learning, Bombay.
9. Chandan, J.S. *An Introduction to Statistical Methods*, Vikas Publishing House, New Delhi.
10. Bhardwaj, R.S, *Business Statistics*, Excel Books, 2000
11. Kothari C.R., *Quantitative Techniques*, Vikas Publishing House, New Delhi

DATA SOURCES FOR LITERATURE REVIEW

Paper Code: 17IMSPC3

Max. Marks: 100

Internal Assessment: 100

Learning Outcomes:

- CSO1. Development of the orientation towards various literature search sources and familiarise with the functionality of various web based databases.
- CSO2. Students would be able to highlight what has been done so far.
- CSO3. Cater to knowledge base for research area.
- CSO4. Contextualising research findings.
- CSO5. Ability to ensure novelty in research work.

Unit – I

Application of Internet in research: Directory of Open Access Journals (DOAJ), Use of E Journals, Use of E- library, use of EBSCOhost Online Research Databases, online database of Academic Libraries.

UNIT – II

Library and Information Networks with special reference to India: DELNET, INFLIBNET, ERNET, NICNET. Internet based resources and services such as mailing list and scholarly discussion lists, bulletin board, computer conference and virtual seminars.

UNIT – III

Study of the features and functionality of literature sources (e.g. Dictionary.com, Encyclopedia Britannica, Wikipedia, ACM digital Library, IEEE / IEE Electronic Library Online (IEL), Emerald, EBSCO, PsycINFO, Elsevier Science, J-Gate, JSTOR, Web of Science, SCOPUS, DOAJ, RePEc, etc.)

UNIT – IV

Searching and evaluating of research papers; Book reviews; e books; e-Conferences, Virtual Seminars. Scholarly Web searching: Google Scholar.