

DEPARTMENT OF COMMERCE

P.HD PROGRAMME

PROGRAMME SPECIFIC OUTCOMES:

- PSO1: It is helpful for students; transition from students to professional, by providing them with the fundamental knowledge needed in a commerce career; and with new opportunities to develop their collaborative leadership skills; which are very much important in corporate world as well as in academia also.
- PSO2: A good grounding in academic knowledge is an invaluable prerequisite for a commerce career. Because commerce involves such a wide range of skills, from the mathematical to the interpersonal, and Ph.D in Commerce demands excellence across a wide range.
- PSO3: This programme focus on the factors that drive economic behavior at both an individual and organizational level. It will equip the scholars with analytical, communication and problem solving skills to effectively identify issues and challenges and find the best solution for practical problems.
- PSO4: To suggest about elimination of deficiencies in various government policies with the help of current research findings and studies available in India.
- PSO5: To suggest about resolving social and economic issues of the society by introducing new ways to solve the problems and execution of the work through latest research work.

- PSO6: It is helpful to encourage research environment; which is a real contribution towards Indian economy and society because without research; growth is impossible.
- PSO7: To inculcate the ability of formulating the research proposal, analyze the research questions and use them significantly in the research areas.
- PSO8: To be able to lead various research projects and occupy the challenging academic positions.

Scheme of Examination of Ph.D Course in Commerce

w.e.f. the January-2017

(January-December)

Semester-I

Compulsory Papers: -

Paper Code	Title of the Paper	Max. Marks and Credits				Time
		Theory	Int. Ass.	Total	Credits	
17COM11MPC1	Quantitative Techniques	80	20	100	4	3 Hours
17COM11MPC2	Research Methodology	80	20	100	4	3 Hours
17COM11MPC3	Computer Applications in Research - I	80	20 (Practical)	100	4	3 Hours
Total				300	12	

Total Credits

Total Marks

Ph.D Course Work

12

300

Ph.D. Course Work w.e.f. January - 2017
Semester-I
Paper Code 17COM11MPC1
Quantitative Techniques

Marks of Theory: 80
Internal Assessment: 20
Credits: 4
Time: 3 hours

Course Outcomes:

- CO1: Students will gain a comprehensive understanding of the concept of Sampling Theory.
- CO2: Will equip students with techniques of Descriptive statistics.
- CO3: Students will gain skill of applying simple, partial and multiple Correlation & Regression techniques.
- CO4: Students will understand application of Non- parametric tests.
- CO5: Will enable the students comprehend the meaning, assumptions and application of Parametric tests.

Note: The examiner shall set nine questions in all covering the whole syllabus. Question No.1 will be compulsory covering all the units and shall carry 8 small questions of two marks each. The rest of the eight questions will be set from all the four units. The examiner will set two questions from each unit out of which the candidate shall attempt four questions selecting one question from each unit. All questions shall carry 16 marks each.

- Unit 1. Sampling - Sampling techniques, sampling error, Sample size determination in finite and infinite population. Descriptive statistical techniques with their application, Tests of normality or normalization, Time series analysis
- Unit 2. Correlation and regression simple, partial and multiple.
- Unit 3. Non –Parametric Tests: The runs and median test of randomness, tests of two-matched samples: Sign-test, Wilkson test, Signed Rank- Sum test, The Mann-Whitney-U-Test, The Kruskal Wallis-test, Friedmani`s test for K. Related samples, tests involving two independent samples; Median test, Wald-Wolfwitz number of Runs test.
- Unit 4. Parametric tests; T-test and Chi-Square test, Analysis of Variance – one way classification, two way classification, Business Forecasting – various methods of business forecasting, uses, problems and Limitations of business forecasting method, ANCOVA, MANOVA, MANCOVA.

Suggested Readings:

1. Kothari, C.R - Quantitative Techniques
2. Gupta, S.P - Statistical Method
3. Vohra, N.D - Quantitative Techniques in Management
4. Srivastava, Shenoy and Sharma - Quantitative Techniques for Managerial Decision.

M.Phil (Commerce) / Ph.D. Course Work w.e.f. January - 2017
Semester - I
Paper Code 17COM11MPC2
Research Methodology

Marks of Theory: 80
Internal Assessment: 20
Credits: 4
Time: 3 hours

Course Outcomes:

CO1: To learn the meaning of Research, Research Process, Formulation of the Research Problem and Hypothesis.

CO2: To understand Exploratory (or Formulative) Research Studies, Hypothesis Testing Sampling Techniques or Methods: Probability Sampling, Non-probability Sampling

CO3: How to explore the Measurement, scaling techniques-Rating and Ranking, Differential Scales, Summated Scales, Cumulative Scales.

CO4: To understand meaning of Data, Sources of Data-Primary Sources and Secondary, Questionnaire Method, Schedule Method, Interview Method, Observation Method, processing of Data: Editing, Coding, Classification, Tabulation, Interpretation of Data: forms of Interpretation, Prerequisites for Interpretation.

CO5: To study about Precautions in Interpretation, Findings, Graphic Presentation, Diagrams, Pictures and Maps, Tabular Presentation, Difficulties in Presentation, Report Writing etc.

Note: The examiner shall set nine questions in all covering the whole syllabus. Question No.1 will be compulsory covering all the units and shall carry 8 small questions of two marks each. The rest of the eight questions will be set from all the four units. The examiner will set two questions from each unit out of which the candidate shall attempt four questions selecting one question from each unit. All questions shall carry 16 marks each.

Unit-1 Research: Meaning, Characteristics, Types and Relevance of Research; Research Process; Identification and Formulation of the Research Problem.
Hypothesis: Meaning, Types, Need, Functions and Sources of Hypothesis; Process of setting Hypothesis.
Concepts: Meaning, Significance, Characteristics, Types; How to Use Concepts; Operationalisation of Concepts.

Unit-2 Research Design: Meaning, Features, Need for Research design, Components of Research design.
Research Design for Exploratory (or Formulative) Research Studies.
Research Design for Descriptive and Diagnostic Research Studies.
Research Design for Hypothesis Testing or Experimental Research Studies.
Sampling Design: The Concept of Sampling, Aims of Sampling, Census versus Sample Surveys, Characteristics of a Good Sample, Basis of Sampling.
Sampling Techniques or Methods: Probability Sampling, Non-probability Sampling; Problems in Sampling. The Sample Size.

- Unit-3 Measurement: concept, Levels and components of Measurement, Techniques of Developing Measurement Tools, sources of Error in measurement, Tests of Sound Measurement.
Scaling: Meaning of Scaling, Bases of Scales- classification, important scaling techniques-Rating and Ranking. Approaches of the scale construction, different types of scales-Arbitrary Scales, Differential Scales, Summated Scales, Cumulative Scales.
- Unit-4 Collection of Data: Meaning of Data, Types of Data, Importance of Data, Sources of Data-Primary Sources and Secondary Sources: Documentary Method, Questionnaire Method (including online questionnaire via google.doc), Schedule Method, Interview Method, Observation Method.
Processing of Data: Editing, Coding, Classification, Tabulation.
Interpretation of Data: forms of Interpretation, Prerequisites for Interpretation, Precautions in Interpretation, conclusions and Generalizations, sources of Errors in Interpretations.
Presentation of Findings: Descriptive Presentation, Graphic Presentation, Diagrams, Pictures and Maps, Tabular Presentation, Difficulties in Presentation.
Report Writing: Meaning, Functions and Types of Research Report, Steps of Planning Report Writing, Research Report Format, Principles of Writing, Documentation, Writing and Typing the Report.

Suggested Readings:

1. K N Krishnaswamy, Appa Iyer Sivakumar and M. Kathirajan, Management Research Methodology, New Delhi : Pearson,
2. P. Panneerselvam, Research Methodology, New Delhi : PHI
3. David Dooley, Social Research Methods, NJ: Prentice Hall
4. Hans Raj, Theory and Practice in Social Research, New Delhi: Surjeet
5. K.V.Rao, Research Methodology in Commerce and Management, New Delhi : Sterling
6. B.N.Ghosh, Scientific Methods and Social Research, New Delhi: Sterling
7. Johari Bayle (Ed). Introduction to the Methods of Social Sciences, New Delhi: Sterling
8. R.Parshad Sharma and P. Satyanarayana, Research Methods in Social Sciences, New Delhi: Sterling
9. Y.P.Aggarwal, Better Sampling Concepts, Techniques and Evaluation, New Delhi: Sterling
10. B.N.Ghosh, Lectures on Scientific Method, New Delhi: Sterling
11. Wilkinson and Bhandarkar, Methodology and Techniques of Social Research, New Delhi: Himalaya
12. P. Saravanavel, Research Methodology, New Delhi: Kitab Mahal
13. V.P. Michael, Research Methodology in Management, New Delhi: Himalaya
14. S N Murthy and U Bhojanna, Business Research Methods, New Delhi: Excel
15. Yogesh Kumar Singh, Fundamental of Research Methodology and Statistics, New Delhi: New Age
16. O.R. Krishnaswami and M. Ranganatham, Methodology of Research in Social Sciences, New Delhi: Himalaya
17. Dipak Kumar Bhattacharyya, Research Methodology, New Delhi: Excel

Course Outcomes:

- CO1: Introduction of research software SPSS with their basic tools & concept learning such as Data Entry, Editing, Chart building, Toolbar, Menus, Opening and Saving Files etc.
- CO2: To learn how to prepare the data files, defining variables, value Labels, missing values, Data Entry, Deleting Cases etc.
- CO3: How to check the errors in data entry, different techniques to access the normality of data, data transformation – recode, compute, data selection.
- CO4: Hands on learning experience on different tabs of SPSS such as Analyze etc.
- CO5: Performing the basics statistical tests such as Frequency Distribution, measurement of central tendency, Correlation etc.

Note: The examiner shall set nine questions in all covering the whole syllabus. Question No.1 will be compulsory covering all the units and shall carry 8 small questions of two marks each. The rest of the eight questions will be set from all the four units. The examiner will set two questions from each unit out of which the candidate shall attempt four questions selecting one question from each unit. All questions shall carry 16 marks each. Evaluation of Practical shall be done by a Board of examiners consisting of one internal examiner and one external examiner to be appointed by the HOD Commerce.

UNIT-I

Introduction to SPSS: SPSS Environment - Data Editor, Viewer and Draft Viewer, Chart Editor, Text Output Editor, Toolbar, Menus, Dialogue Boxes, Opening and Saving Files.

UNIT-II

Preparation of Data Files: Defining Variables – Variables Labels, Value Labels, Missing Values, Variable Types, Column Format, Measurement Level; Data Entry, Inserting and Deleting Cases and Variables, Moving Variables.

UNIT-III

Data Screening and Transformation: Errors in data entry; Accessing Normality – Histograms, stem and leaf plots and box plots, Kolmogorov – Smirnov and Shapiro Wilk Statistics, Skewness and kurtosis; Assessing normality by group; Variable transformation; Data transformation – recode, compute, data selection.

UNIT-IV

Data Analysis: Descriptive statistics – Frequency Distribution, measurement of central tendency and variability; Reliability test, Correlation; One Sample t-test, t-test with more than one sample – repeated measures t-test and independent groups t-test; One-way and Two-way between groups ANOVA with post-hoc comparisons; One-way analysis of Covariance (ANCOVA); Chi-square tests.

Suggested Readings:

Sheridan J Coakes; Lyndall Steed and Peta Dzidic. SPSS for Windows – Analysis without Anguish. Wiley India.

Darren George and Paul Mallery, SPSS for Windows Step by Step: A Simple Guide. Pearson

Donald Cooper, Pamela Schindler. SPSS Windows Student Version for use with Business Research Methods. Tata McGraw Hill.

Julie Pallant. SPSS Survival Manual. Tata Mc Graw Hill

KIRAN PANDYA, SMRUTI BULSARI, SANJAY SINHA. SPSS IN SIMPLE STEPS. Wiley India.