MANGALORE UNIVERSITY

SCHEME OF EXAMINATION FOR Ph.D. COURSE WORK IN BUSINESS ADMINISTRATON

Papers	Particulars	Hours of Instruction per week	Duration of Exam. (hrs.)	Marks			
				IA	Theory	Total	Credits
Paper 1	Research Methodology	4	3	30	70	100	4
Paper 2	Review of Literature						
	Review Report	16	-	-	-	150	8
	Viva	-	-	-	-	50	2
							14

PAPER-1: RESEARCH METHODOLOGY

Objective: To provide an understanding of the basic research procedures and enable the researcher to use scientific tools and concepts in business research.

Unit I
The Role of Research – Types of Research – Theory Building - Goals of theory - Meaning of Theory – Verifying theory – Scientific Method in theory building.

Unit II
An overview of Research process – Problem definition in different types of research - Stages in research process – Qualitative and quantitative research methods.

Unit III
The Nature of qualitative research - Basic terms and criteria for using qualitative research methods - Methods of collecting qualitative data: Observation methods, Personal interview method, Depth interview, Focus group method, the case study method, ethnography, grounded theory analysis - Content analysis, thematic analysis, narrative analysis, critical management research, projective techniques, Socio-metric analysis, Afterthoughts on qualitative research.

Unit IV
Literature Review: the process of literature review, literature survey, practical sources of literature, constructing conceptual framework for research based on literature, essentials of writing a good literature review, writing of abstracts.

Unit V
Research Designs: Experimental Research Designs - Meaning of Experiment, Causality, Necessary Conditions for Making Causal Inferences, Concepts used in Experiments, Validity in Experimentation, Definition of symbols, Factors affecting Internal Validity of the Experiment, Factors Affecting External Validity, Methods to control Extraneous Variables, Environments of Conducting Experiments. A Classification of Experimental Designs: Pre – experimental design; Quasi- experimental designs; True experimental designs; Statistical designs. Exploratory research design

Unit VI
Collection of Data: Types and sources of data, relative merits of each type of data- Survey research – definition, advantages, structured and disguised data collection, the influence of technology on survey research; Obtrusive and Unobtrusive methods: observation of behaviour of people and objects – physical activity and evidence, verbal behaviour – expressive behaviour – special relations & locations - Classification, codification and tabulation of data.

Unit VII
Questionnaire design- questionnaire contents and its design; Scaling techniques- Measurement and Attitude Scaling - Types and levels of measurement - An overview of different scaling techniques – Pilot study and Pre-testing – objects, process and their significance.

Unit VIII
Sample and sampling – Sample Vs population – Need for sample – Different methods of sampling - Suitability of each of these types and methods – Sampling & non-sampling errors – Sample size & its determination - Estimation – types, criteria, calculation of Interval estimates, Interval estimation and confidence intervals, determining the sample size in estimation.

Unit IX
Hypothesis - types of hypothesis - formulation of hypothesis - procedure for testing hypothesis - testing for means, difference between means, proportion testing and variance testing.

Unit X
Hypothesis testing techniques - Chi square test - Goodness of fit test - scope and limitations, applications - Analysis of Variance - its applications, One-way and Two-way ANOVA - Multiple regression and correlation analysis (three variables only); non-parametric tests – Runs test, Kolmorgnov- Smirnov test; Kruskal-Wallis test; Mann-Witney's U test; Ranks test and other important tests.

Unit XI

Multivariate analysis - Meaning of Multivariate analysis - Multivariate data analysis - Multivariate analysis techniques - Multiple regression analysis - Logistic -regression analysis - Cluster analysis - Discriminant analysis -Multivariate analysis of variance (MANOVA) - Multidimensional scaling (MDS) - Correspondence analysis - Conjoint analysis - Canonical correlation - Structural equation modelling.

Unit XII

Basics of Vectors- Eigen vectors, mean vectors and co-variance matrix – transpose of a matrix, matrix inverse.

Principal Component Analysis- Principal Components, correlation and co-variance matrix techniques for principal components.

Unit XIII

Factor Analysis- The Concept of Error, the Common Factor Model, Reliability, Communality - Common Factors, Specific Factors, Estimating Reliabilities, Iterating to Stable Communalities - Kaiser's Alpha Factor Analysis (the Little Jiffy) - Guttman's Image Covariance Analysis- Rao's Maximum Likelihood Factor Analysis.

Unit XIV

Basic concepts of SPSS and Data analysis with SPSS - What is SPSS - Basis operations in SPSS - Generating a frequency table - Generating a bar chart - Generating a Pie chart - Generating a Histogram -Generating Arithmetic mean, median, standard deviation and range - Generating Chi square test and correlation analysis -Generating ANOVA test and Regression analysis.

Unit XV

Research Report writing - planning and organizing – Format - writing styles – various style manuals (referencing styles) - documentation – Outline of a report on the research project.

References:

1. Zikmund, *Business Research Methods*, Thomson Learning, New Delhi.
2. Levin & Rubin, *Statistics for Management,* Pearson Education, New Delhi.
3. Srivastava U.K., Shenoy G.V & Sharma S.C, *Quantitative Techniques for Managerial Decisions,* New Age International (P) Ltd. Publishers.
4. Gupta S.P., *Statistical Methods*, Himalaya Publishing House, Mumbai.
5. Cooper D.C. & Schindler P.S, (2013), *Business Research Methods*, McGraw-Hill Education - 12th edition
6. Wilkinson & Bhandarkar, *Methodology and Techniques of Social Research*, Himalaya Publishing House, Mumbai.
7. Young P.V., *Scientific Social Surveys and Research*, Prentice-Hall of India Pvt.Ltd., New Delhi.
8. Krishnaswamy O.R., *Research Methodology*, Himalaya Publishing House, Mumbai.
9. Cooper D.C. & Emory C.W., *Business Research Methods*, McGraw-Hill Publishing House, Delhi.
10. Rencher C Alvin and Christensen F William- *Methods of Multivariate Analysis*, Wiley and Sons.
11. Neil H. Timm, *Applied Multivariate Analysis*, Springer.
12. Dennis Child, *The Essentials of Factor Analysis*, Continuum International Publishing Group.
13. Deepak Chawla and Neena Sondhi, *Research Methodology: Concepts and Cases*, Vikas Publishing House Pvt Ltd.
14. Harman, H.H., (1976*), Modern Factor Analysis, Third Edition*, Chicago: University of Chicago Press.
15. Jolliffe, I. T., (2002) *Principal Component Analysis, Second Edition*, Springer
16. Tsay, Ruey S. (Spring Quarter 2008), *Lecture 6: Principal Component Analysis,* Graduate School of Business, The University of Chicago
17. Stevens, J. (1996). *Applied multivariate statistics for the social sciences,* Mahwah, NJ: Lawrence Erlbaum Publishers.
18. Tabachnick Barbara G., *Using Multivariate Statistics*, Pearson publication-Fifth Edition
19. Anderson, Carolyn J., *Principal Components Analysis,* Edps/Soc 584 and Psych 594, *Applied Multivariate Statistics*, Department of Educational Psychology, University of Illinois
20. Ranjit Kumar, (2014), *Research Methodology: A step-by-step guide for beginners- III edition* , SAGE Publication India Pvt Ltd.
21. Helen Mongan Rallis, (2014), *A Step-by-step guide for writing a literature review.*

Ph.D. (Business Administration)

Paper -2 : Review of Literature

The Review of Literature shall be in the area of Research topic chosen by the Research candidate related to Finance, Accounting, Information Technology, H.R.M., H.R.D., Banking and Insurance, Marketing, Development Issues, Third Sector, Micro, Small and Medium Enterprises and other interdisciplinary areas in consultation with the guides.