Ph.D. Course Work
Syllabus

Malwanchal University
Index City, Nemawar Road, NH-59A,
Indore, M.P.- 452016

Ph.D Course Work Syllabus

Program	Paper Code	Paper Name	Credit Offered	Theory (End Semester)	Practical (End Semester)	Theory (Continuous Evaluation)	Practical (Continuous Evaluation)
Ph.D Course Work	Ph.D - 101	Research Methodology	5	Max Marks =80 Duration =3 hrs	-	20	-

Unit-1: Meaning, Importance of Research & Research Method

Meaning and Importance of Research: Types of Research, Qualities of Researcher, Components of Research Problem, Various Steps in Scientific Research, Selection and formulation of Research Problem, Research Design, Research Method: Historical, Institutional, Legal, Philosophical, Comparative, Ethical, Survey, Case Study, Content Analysis, Experimental Method, Triangulation, Mixed Method Research Hypothesis – different types.

Unit-2: Critical Analysis of Literature Review & Report Writing

Critical Analysis of Literature Review: Source of Literature, Various referencing procedures, maintaining literature data using end note 2, identifying the gap areas from the literature review and research data base, problem formulation, identifying variables to be studied, determine the scope, objectives, time plan for achieving targeted problem solution. Report writing structure and component of research report, types of report, good research report.

Unit-3: Quantitative Methods

Meaning and Definition of Quantitative Method. Measure of Central Tendency; Calculation of Mean, Median and Mede. Measure of Dispersion Range, Mean Deviation and standard Deviation. Correlation and Regression Test of Significance: student t- Test, F- Test and Chi-Square Test.

Unit-4: Research Ethics

Ethics issues in Research, IPR: intellectual Property rights and patent law, techniques of writing patent, filing procedure, technology transfer, copy right, royalty trade related aspects of intellectual property rights. Publishing: Design of research paper, Citation acknowledgement, Plagiarism tools, Reproducibility and Accountability.

Unit-5: Review of Published Research in Relevant field

Examining the methods of evaluating and interpreting published research. Developing skills needed to research available literature for information relevant to a given topic. Exploring the principles and techniques of topic development and testing. Examining the methods of evaluating and interpreting data collected in the research process.

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Program	Paper Code	Paper Name	Credit Offered	Theory (End Semester)	Practical (End Semester)	Theory (Continuous Evaluation)	Practical (Continuous Evaluation)
Ph.D Course Work	Ph.D - 103	Review of Literature	3	-	80	-	20
Ph.D Course Work	Ph.D - 104	Comprehensive Viva	4	-	-	-	100

Each research student will submit two assignments – one from each paper (Ph.D-101 & Ph.D-102) – on any one unit of the student's choice.
Each research student will also give a presentation on any one topic of the student's choice from either of the two papers (Ph.D-101 / Ph.D-102).

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Program	Paper Code	Paper Name	Credit Offered	Theory (End Semester)	Practical (End Semester)	Theory (Continuous Evaluation)	Practical (Continuous Evaluation)
Ph.D Course Work	Ph.D - 102	Computer Application	3	Max Marks =50 Duration =3 hrs	30	20	-

Unit-1: Introduction

Classification of computers Types of Computer memory, types of software: application of system software; operating system and types, single user, multi- user, multi-tasking, single tasking, application of computer for research.

Unit-2: Data Communication and Networks

Data communication concepts, local area network , metropolitan area network and wide area network, internet, intranet, extranet, website, Email, search engines-enterprise, E- communication and E-collaboration.

Unit-3: MS Office and its application

File handing in window, various of MS Office, MS- Word: Text formatting, Mail merge, Macro, MS-Excel: Features, various formula and functions, MS-Power Point: Creating presentations and adding effects.

Unit-4: SPSS

Introduction to SPSS: Definition, objectives and features, data analysis using SPSS: Data entry creating variables, switching to data labels. Data analysis: Frequencies, recording into different recording into different variables, cross tabulations and layers.

Unit-5: Application of Internet in research

INFLIBNET, Use of Internet, site – DOAJ Use of E Journals, Use of E- library, use of EBSCO HOST online database of Academic Libraries.

References:-

1. Henry C. Lucas. Jr.[2000]. Information Technology for management. Tata McGraw-Hill Publishing Company Ltd. New Delhi.
2. Sinha P.K. [1992]. Computer Fundamentals, BPB Publications, New Delhi.
3. SPPSS- Operating manual and handbook – latest version.
4. Chandera. A. and Saxena. T.P. [2000], Style Manual. Metropolitan Book Co. Ltd. New Delhi.
5. Balaguruswamy. E. [2009]. Programming in ANSIC. Tata McGraw-Hill Publication. New Delhi.

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Reference Books:

1. Kothari, C.R. [2008]. Research Methodology and Techniques, Second Edition. New Age International Publishers, New Delhi.

2. Sinha, S.C. and Dhiman, A.K. [2002]. Research Methodology, Ess Publication. Volume 2, New Delhi.

3. Kothari C.R. [2005]. Quantitative Techniques, Vikas Publishing House, New Delhi.

4. Gupta S.C. [2009]. Fundamental of Statics, Himalaya Publication House, Bombay.

5. Kumar. [2011]. Research Methodology: A step by step guide for beginners, sage Publication Ltd. New Delhi.

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