<u>Syllabus in detail</u>

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: SCIENTIFICCONDUCT (5hrs.)**

    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.)**

Ph. D (Doctor of Philosophy) Course Work: 2012-13
Paper – I: Computer Applications

UNIT- I

Basic computer organization, Block Diagram of a computer, History, generation and characteristics of computers, Classification and criteria of computers, Types of computers and PCs, Algorithms and flowcharts, Data representation and Data processing

UNIT – II

Different types of input and output devices, Memory and storage devices, Characteristics of different types of memories, Roll of memory in technology of PCs

UNIT – III

Introduction and types of softwares, Application of software packages, software in Education, training and research, DOS applications, Introduction of M.S. office, Files system and their management, software and file's security

UNIT – IV

Concept of computer languages, Types of computer languages, Application computer languages, Introduction to Databases, DBMS and RDBMS, Data Structure and database models, Components of DBMS, Data normalization, Applications of database in research

UNIT – V

Computer networks & related devices, Topologies, Types of Connections, Data communication & transmission media, Communication systems, Introduction to Internet & protocols, Web Browsers, URL, WWW, Search engines, Domain names & IP Address Network security

Mahatma Gandhi Chitrakoot Gramodaya Vishwavidyalaya, Chitrtakoot-Satna (M.P.)

Syllabus for M.Phil/Ph.D. Course Work (Research Methodology)

Credit- (3+0)= 3

Course-I

Unit-I   Introduction to research:

1.1   Meaning, Definition, Need and Importance of research.
1.2   Objectives of research.
1.3   Scientific research-characteristics and steps of scientific research.
1.4   Scientific research problem, Sources of research problem, qualities of a good research problem and identification of various, research problems.
1.5   Formulation of Hypothesis.

Unit-II   Methods of Research:

2.1   Historical Method.
2.2   Survey Method.
2.3   Action Research.
2.4   Experimental Method.
2.5   Qualitative & Quantitative Research.

Unit-III   Basic Concept of research Design:

3.1   Introduction of research Design.
3.2   Meaning of population and sample, Qualities of a good sample.
3.3   Random methods of sampling.
3.4   Stratified random sampling.
3.5   Purposive sampling.

Unit-IV   Tools and Techniques of Data Collection analysis and Interpresentation:

4.1   Tools of data collection -(a) Questionnaire (b) Schedule (c) Observation (d) P.R.A.
4.2   Measure of central tendency.
4.3   Measure of Variability.
4.4   Correlation and its computation.
4.5 x^2 test and t-test.

Unit-V   Report Writing:

5.1   Importance of Report writing.
5.2   Content of the Report writing.
5.3   Qualities of a research.
5.4   Qualities of a good researcher.
5.5   Qualities of a good Guide/Supervisor.