# B.R. AMBEDKAR BIHAR UNIVERSITY, MUZAFFARPUR DIRECTORATE OF DISTANCE EDUCATION SYLLABUS FOR M.Phil. IN GEOGRAPHY

### Effective from-----

Semester- I	Title of the Course	Full Marks			Credits
		UE	IA	Total	Orouto
Paper-I	Quantitative and Cartographic Techniques in Geography	70	30	100	4
Paper-II	Research Methodology	70	30	100	4
Paper-III	Computer Application	70	30	100	4
	Total	210	90	300	12

# Paper- I -- Quantitative and Cartographic Techniques in Geography

### Unit-I

- 1) Geographic data and Field technique,
- 2) Development of quantitative methods in Geographic data,
- 3) Nature of Physical, Socio-economic and Demographic data

### Unit-II

- 4) Measurement of data, Level of measurement of spatial data, Distribution measures.
- 5) Nearest neighbour analysis, Spatial diffusion technique, Lorenz Curve, Quartiles,

6) Significance test of small and large samples

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# Unit-III

- 7) Statistical Analysis of Geographic data, Correlation and Regression methods of geographic variables,
- 8) Hypothesis testing, Para-metric and non-Para-metric procedures, Sampling distribution and standard error, Chai-square test, t-test...
- 9) Diagrammatic and Graphic presentation of Data,

## Unit-IV

- Base Map- Preparation and Map making, Map compilation and 10) generalization, Map design and lay-out, Preparation of Thematic maps.
- Use of Internet, GIS and GPS in Geographic Research
- Computer Application in Geography, Data analysis, Sketching and mapping

# Paper-II

# Research Methodology in Geography

### Unit-I

Geographic 1) Research: Meaning and concept, Objectives, Importance of research

2) Research types- Pure and applied research, Action and Methodological research, Descriptive and Diagnostic research, Exploratory Experimental research.

- 3) Field Study- Meaning and concept, types and importance Social survey and Social research.
- 4) Inter-disciplinary approach and System Approach in Geography

### Unit-II

- Identification of the research problems, Origin and sources of problems,
   Statement and kinds of problems.
- 6) Hypothesis- Nature, types and sources of hypothesis, Hypothesis and theory, Hypothesis and problems, Characteristics of a testable Geoscientific hypothesis, Formulation of hypothesis.
- Research design- Meaning and concept, Types, Purpose and Principles of research design, Characteristics of a scientific research design.
- 8) Meaning and concept of Geographic Variables, Types- Dependent, Independent, O, S and R Variables, Qualitative, Quantitative and Attribute Variables. Control of Variables.

# Unit-III

- 9) Data- Types and Sources of Data- Primary and Secondary,
- 10) Review of Literature, resons and how to conduct.
- 11) Sampling- Definition, Principles, Types and techniques.
- 12) Data Collection Techniques, Methods of Primary and Secondary,

# **Unit-IV**

13) Data Analysis, Editing, Coding, Classification and Tabulation of data.

14) Basic Statistical Concept, in Geographic research, Measures of Central Tendency- Mean, Median and Mode

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- 15) Measures of Variability, Range, Mean and Standard Deviation, Correlation- Types, Co-fficient of Correlation, Rank Correlation Method
- 16) Formulation of Research Project Proposals, Budgeting, time schedule, research monograms, Bibliography, Internet, e-Journal and e-books, Glossary and Report Writing

# Paper- III -- Computer Application

### Unit-I

- Computer System: An overview, Basic application of computer in different fields.
- 2) Functional Components of a Computer
- 3) Benefits and limitations of Computer
- 4) Computer virus and Cyber crime

### Unit-II

- 5) MS Window operating System- features.
- Getting started with window, Creating and managing files and folders, Renaming, Copy, Paste, Delete
- Basic window accessories, Mouse, printer, Control panel, Creating shortcut.
- 8) Shutting down the Computer.

# Unit-III

9) Introduction to MS Word and MS Excel

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- 10) Font types and size, How to type, edit, format and save a document, spell check, pagination, paragraph set up and inserting pictures.
- Creating tables and charts in Word and Excel. 11)
- 12) Printing and closing the documents.

# **Unit-IV**

- MS Power Point, Making Slides and other steps to Power Point 13) Presentation, Physical aspects of a Power Point Presentation.
- Creating new Presentation, Editing, Adding new slides, Inserting 14) pictures, Creating Slide shows
- 15) Internet, a concept of using Internet, Sending and Receiving Emails.
- 16) Attachments, Logging in.

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