

**M. Phil (2015-16)**

**Geography**

**The duration of the M. Phil Course shall be one academic year.**

**Allotment of Marks**

	<b>Theory/Lab Course</b>		<b>Marks</b>
i	Theory - I	Research Methodology and Computer Application in Geography	100
ii	Theory-II	Modern Concepts and Approaches in Geography	100
iii	Theory-III		
	Or Lab Course	Cartographic and Quantitative Techniques, Remote Sensing & GIS	100
<b>Total Marks</b>			<b>300</b>
iv	Seminar	Based on Theory	50
v	Dissertation	Seminar based on dissertation	50
		Script Writing	75
		Viva-voce	25
<b>Total Marks</b>			<b>200</b>
<b>Grand Total</b>			<b>500</b>

(1) The M. Phil in Geography Examination, 2014-15 shall be of two theory paper, a Practical and Dissertation as follows :-

(2) **THEORY PAPERS :-**

Paper – I : Research Methodology and Computer Application in Geography.

Paper – II : Modern Concepts and Approaches in Geography

**PRACTICAL:**

Cartographic and Quantitative Techniques, Remote Sensing and GIS

**Dissertation:**

The distribution of marks shall be as follows:-

- (a) Each theory paper shall carry 100 marks.
- (b) 50 marks shall be allotted to the seminar based on theory.
- (c) The Practical shall carry 100 marks of which 20 marks shall be allotted to the practical record, 20 marks on viva-voce and 60 marks to the examination held at the time of annual examination
- (d) The Dissertation shall carry 150 marks divided as under
  - (i) Script - 75 Marks
  - (ii) Viva - 25 Marks
  - (iii) Seminar - 50 Marks

(3) **Note :**

- (A) The assessment in the seminar shall be done by the Internal Examiners.
- (B) The assessment of the Practical Record, carrying 20 marks and viva voce carrying 20 marks shall be done at time of the annual examination jointly by the external and internal examiners.
- (C) The Candidate shall submit at the time of their Practical examination, their Practical Records duly signed by the teachers concerned with dates of signature.

## Paper - I

### Research Methodology and Computer Application in Geography

- UNIT – I : Research Methodology-An Overview; Procedure of Scientific Research; Some Methodological Controversies and Explanation in Geography; Defining Research Problem; Formulating Hypothesis; Research Design.
- UNIT - II : Methods of Data' Collection; Observation, Questionnaire, Schedule and Interview; Sources of Data in Different Branches of Geography; Sampling: Need for Sampling Methods, Size of Sampling; Measurement and Scaling Techniques, Measurement in Research, Measurement Scales, Sources of Error in Measurement; Scaling: Meaning of Scaling, Scale\of Classification Bases, Important Scaling Techniques.
- UNIT – III : Processing and Analysis of Data: Processing-Editing, Coding, Classification and Tabulation, Analysis- Measurement of Central Tendency; Dispersion and Relationship, Probability; Hypothesis Testing, Simple Regression; GIS.
- UNIT – IV : Interpretation and Preparation of Research Reports: Meaning and Techniques of Interpretation, Steps, Layout and Types of Reports: Computer application.

### BOOKS RECOMMENDED;

- Selltiz, C.M. Jahoda, M. Deutsch and S. Research Methods in Social Relations, Holt, . New York, 1961.
- Goode, W and P.K, Hatt Methods in Social Research, Mc Graw Hill, .Tokyo, 1962.
- Harvey, David . Explanation in Geography, Edward Arnold, London, 1971
- Chorley, R.J. and P. Haggett (ed) Models in Geography, Methuen,London, 1967.
- Minshull, R. Introduction to Models in Geography. Longman London, 1975.
- Sheskin, I.M. Survey Research for Geographers Scientific Publisher~, Jodhpur, 1987.
- Kothari, C. R. Research Methodology : Methods and Techniques, Wishwa Prakashan, 1994.
- Misra H.N. and V.P. Singh Research Methodology in Geography: Social, Spatial and Policy Dimensions, Rawat Publications New Delhi, 1998.
- Har Prasad Research Methods and Techniques in Geography, Rawat Publications, New Delhi. 1992.

## Paper – II

### Modern Concepts and Approaches in Geography

- UNIT – I : Modern Concepts and Approaches In Geography Changes in the Philosophy of Geography, Paradigm of Geography, Quantitative Revolution in Geography and Philosophy of Positivism, The Question of Relevance and Ethics in Geography, Humanistic Geography.
- UNIT – II: Behavioral Geography, Welfare Geography, Future of Geography, Analytical Approaches: Spatial Analysis, Ecological Analysis, Complex Regional Analysis, Systems Approach in Geography.
- UNIT – III : Environment - Concepts and Approaches, Concepts of Ecosystem, Ecology and Human Ecology: Approaches to Environmental Studies. Environmental Problems Pollution, Concept of Resources, Resource Evaluation and Conservation. Geography and Environmentalism: The Current View of Man-Environment Relations.
- UNIT -IV: Regional Concept and Methods of Delimiting Regions, Core and Periphery. Central Place Theory, Concept of Growth Pole, Geography and Planning. Theories, Laws and Models in Geographic Explanation.

#### BOOKS RECOMMENDED:

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|--------------------------------------|---|
| Dikshit, R.D.                        | Geographical Thought: A Contextual History of Ideas, Prentice-Hall of India, New Delhi. |
| Harvey, Milton E. & Brian P. Holly:  | Themes in Geographic Thought, Rawat, Jaipur.  |
| Husain, Majid                        | Evolution of Geographical Thought, Rawat, Jaipur.                                       |
| Johnston, R.J. (ed.)                 | The Future of Geography, Methuen, London.   |
| Johnston, R.J. and P. Claval (eds) : | Geography since the Second World War; Helm, Sydney                                      |
| Chorley, R.J. and P. Haggett.        | Models in Geography, Methuen.   |
| Haggett, P.                          | Geography: A Modern Synthesis,; Harper and Row.   |
| Abler, Adams and Gould               | Spatial Organization, Prentice Hall   |
| Brookfield, Harold                   | Interdependent Development, Methuen.  |
| Gupta, H.S. and A.R. Chandraker      | Soils of an Unsurveyed Region: Part of Chhattisgarh, Pt. R.S. U., Raipur.               |
| Mitchell, Bruce                      | Geography and Resource Analysis, Longman.   |
| Forbes, D.K.                         | The Geography of Underdevelopment, New Delhi.   |
| Singh J. and D. N. Singh.            | An Introduction to Our Earth and Environment, Varanasi.                                 |
| Kayastha, S.L. and V.K. Kumra        | Environmental Studies, Varanasi.  |
| Singh, Savindra                      | Environmental Geography, Allahabad.   |
| Misra, R.P.                          | Growth Poles and Growth Centres in Urban and Regional Planning in India, Mysore.        |

## PRACTICAL

### Cartographic and Quantitative Techniques, Remote Sensing and GIS

#### A. Cartographic Techniques:

20 marks

1. Isopleths: Isochrones; Lear month's Cross Tabulation Method.
2. Divided Strips: Population structure.
3. Grouped Squares: Ethnographic distribution.
4. Shop Rent Index Map.
5. The Sieve Techniques.
6. Drainage Analysis.
7. Sex-age Snail Diagram.

#### B. Quantitative Techniques:

20 Marks

1. Sampling Techniques: Point, Line and Area Sampling.
2. Running mean; Describing Point Patterns: Mean Centre and Nearest Neighbor Analysis, Line Patterns: Detour Index and Shape Index.
3. Correlation: Rank order correlation, Product Moment correlation.
4. Tests: 't' Test; 'F' Test; Chi square Test.
5. Rank Size Rule; Lorenz Curve; Functional Classification of Towns; Centrality Index of Central Places.
6. Crop Combination Region, Agricultural Efficiency.
7. Gravity and Potential Models, Linear Regression.

#### C. Remote Sensing and GIS:

20 Marks

1. Photogrammetry - Elements of Photographic System, Types, Scales, Resolution Film, filters and Interpretation of Aerial Photographs.
2. Remote Sensing Applications in Land use/Land cover Mapping- data Storage, Georeferencing, Image Processing-Visual and Digital Image Processing, Image Clasifications.
3. GIS Application and Computer Cartography- Creation of Base map, Georeferencing, digitizing and Map Design.

#### BOOKS RECOMMENDED:

- Monkhouse F.J. and : Maps and Diagrams, Methuen London  
H.R. Wilkinson. (Hindi Translation, 1976)  
Gregory, S : Statistical Methods and the Geographer, 1964.  
Fitz Gerald, Barian P. : Science in Geography Series 1 to 4, Oxford University Press London.

- Yeates, Maurice : An Introduction to Quantitative Analysis in Human Geography, Mc Graw Hill, New York, 1968.
- Nag, Prithvish : Thematic Cartography and Remote Sensing, Concept Pub. Co. New Delhi, 1992.
- Rampal K.K. : Hand Book of Aerial Photography and Interpretation, Concept Pub.Co. New Delhi, 1999.
- Rampal K.K. : Mapping and Compilation, Methods and Techniques, Concept Pub. Co.1993
- Hammond, Rand P.S. Me Cullagh : Quantitative Techniques in Geography An Introduction, Clarendon Press, London, 1974.

### **DISSERTATION**

Within 15 days from the date of admission in the M. Phil. Course, the candidate will finalise his topic of Dissertation and submit to the M. Phil Committee for approval in three copies a brief outline in consultation with a faculty teacher to whom candidate is assigned for guidance.

The Dissertation will be a phased and time bound assignment. The candidate will show his monthly progress to the supervisor.

A candidate will be required to submit three typed copies of his/her dissertation within a month after the completion of theory examination. The dissertation and Viva-Voce shall be valued by both internal and external examiners. A Declaration (Appendix – 1) by the candidate and a certificate (Appendix-2) from the Supervisor/ Co-supervisors shall be included in the dissertation.

The evaluation of the seminar on the dissertation will be done internally by the supervisor and at least one other teacher connected with the course.