2115 B.A. Second Year Subject: Geography Practical – Cartography-II

Course Objectives:

- 1. Enhance understanding about projection and map making.
- 2. Enhance understanding of the concepts regarding projections and thematic mapping techniques.
- 3. Development of of research aptitude.

Learning Outcome:

This is a practical, hands-on course; when you have completed it, you will be able to:

- 1. Explain how maps work, conceptually and technically and will be able to understand science and art of cartography.
- 2. Recognize the benefits and limitations of Diagrammatic Data Presentation.
- 3. Understand and perform interpretation of thematic maps.

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UNIT – I

- 1. Graticule, Meridians and parallels definition and characteristics.
- 2. Map Projections definition, basic concepts, classification, characteristics.
- 3. Characteristics, use and graphical construction along with outline map of the following projections:
 - A. Zenithal projections: orthographic, stereographic and gnomonic (both polar and equatorial cases) (10 exercises)
 - B. Conical projections: Bonne's and polyconic (2 exercises)
 - C. Mercator's projections (1 exercise)
 - D. Globular projection (1 exercise)
 - E. Gall's projection (1 exercise)
 - F. Mollweide's projection (1 exercise)
 - G. Sinusoidal projection (1 exercise)

UNIT – II

- 1. Maps Classification and Types; Principles of Map Design.
- 2. Thematic Mapping Techniques Properties, Uses and Limitations.
- 3. Drawing and use of dot, choroschematic, chorochromatic, choropleth and isopleth maps. (05 exercise)
- 4. Diagrams: elements and characteristics of diagrams. Drawing of diagrams along with appropriate scales: One dimensional, Two dimensional and Three dimensional. (03 exercise)
- 5. Graphs: elements and characteristics of graphs. Drawing of poly graph, band graph, and triangular graph. (03 exercise)

UNIT – III

Basic statistical methods:

- 1. Frequency distribution and its presentation.
- 2. Measures of central tendency: Arithmetic mean, mode and median.
- 3. Measures of dispersion: Standard deviation and coefficient of variation.
- 4. Measures of correlation: Rank correlation and product moment correlation.

Note :

- 1. Candidates will be examined by an External Examiner in consultation with the Internal Examiner.
- 2. In Unit III student must have to submit related exercise in soft bound A4 paper.
- 3. Ex-students will have to complete the prescribed practical work under the guidance of the Head of the Department of the respective college and to produce a certificate to that effect before the commencement of the examination.
- 4. The test paper of practical will be of two hours duration and candidates will be required to answer three questions out of six attempting at least one question from each unit.

Scheme of Examination :

- 1. Candidates will be examined by internal examiner as per existing norms of the University.
- 2. The test paper will be conducted by University along with theory papers. The maximum marks of this paper will be 30 marks.
- 3. The distribution of marks will be as follows:

1	Record Work	15 Marks
2	Viva Voce	15 Marks
TOTAL Marks		30 Marks

4. Ex-students will have to complete the prescribed practical work under the guidance of the Head of the Department of the respective college and to produce a certificate to that effect before the commencement of the examination.

Suggestive:

- 1. Ahmed, K. S., Simple Map Projection, Friends Book House, Aligarh.
- 2. Bygott, J., An Introduction to Map Work and Practical Geography, University Tutorial Press, London.
- 3. Meux, A. H., Reading Topographical Maps, University of London Press.
- 4. Mishra, R. P. and A. Ramesh, Fundamentals of Cartography, Concept Publishers, New Delhi.
- 5. Monkhouse, F. J., Maps and Diagrams, Methuen & Co. Ltd., London.
- 6. Raize, E., General Cartography, McGraw Hill Book Co., London.
- 7. Robinson, A. R., Elements of Cartography, Chapman & Hall.
- 8. Singh, R. L. and P. K. Dutt, Elements of Practical Geography, Student Friends, Allahabad
- 9. Singh, R. L., Elements of Practical Geography, Kalyani Publishers.
- 10. Singh, R. N. and L. R. S. Kanaujia, Map Work & Practical Geography, Central Book Depot, Allahabad.
- 11. Tamaskar E. G. and V. M. Deshmukh, Geographical Interpretation of Indian Topographical Maps, Orient Longman.

- 12. शर्मा जे॰पी॰ : प्रयोगात्मक भूगोल, रस्तोगी प्रकाशन मेरठ।
- 13. जैन शेषमल : प्रयोगात्मक भूगोल, साहित्य भवन, आगरा।
- 14. वर्मा एवं लोढ़ा : प्रयोगात्मक भूगोल, राजस्थान हिंदी ग्रंथ अकादमी, जयपुर।