

B.A. Second Year
Subject: Geography

Practical: Cartography-II (Projections and Presentation of socio-economic data)

Map projections:

1. Meridians and parallels: definition, and characteristics.
2. Map projections: meaning, compromises, classification,
3. Characteristics, use and graphical construction along with outline map of the following projections:
 - i- Zenithal projections: orthographic, stereographic and gnomonic (both polar and equatorial cases) (6 exercises)
 - ii. Conical projections: Bonne's and polyconic (2 exercises)
 - iii. Mercator's projections (1 exercise)
 - iv. Globular projection (1 exercise)
 - v. Gall's projection (1 exercise)
 - vi. Mollweide's projection (1 exercise)
 - vii. Sinusoidal projection (1 exercise)

Presentation socio-economic data:

1. Thematic maps: Elements and characteristics of thematic maps.
2. Drawing and use of dot, choroschematic, chorochromatic, choropleth and isopleth maps (6 exercises)
3. Diagrams: elements and characteristics of diagrams.
4. Drawing of diagrams along with appropriate scales:
 - i. One dimensional (2 exercises)
 - ii. Two dimensional (3 exercises)
 - iii. Three dimensional (3 exercises)
 - iv. Traffic flow diagram (1 exercise)
5. Graphs: elements and characteristics of graphs.
6. Drawing of poly, band, and triangular graphs. (3 exercises)

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.

Notes:

1. Candidates will be examined by an External Examiner in consultation with the Internal Examiner.
2. Each exercise should be drawn on $1/4^{\text{th}}$ of a full drawing sheet.
3. The test paper of practical will be of two hours duration and candidates will be required to answer three questions out of five.



4. The distribution of marks will be as follows:

a. Paper	36 Marks
b. Record Work*	14 Marks
c. Viva-voce**	10 Marks

* Record work will be assessed by the teacher in-charge of the practical group and the external examiner.

** Viva-voce will be based on the record work.

5. 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.

Suggested Readings:

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. : प्रायोगिक भूगोल, रस्तोगी प्रकाशन, मेरठ
13. जैन, शेषमल : प्रायोगात्मक भूगोल, साहित्य भवन, आगरा
14. भल्ला, एल. आर. : प्रायोगात्मक भूगोल, के.डी. प्रकाशन अजमेर
15. मामोरिया चतुर्भूज : मानचित्र विज्ञान एवं प्रायोगात्मक भूगोल, साहित्य भवन, आगरा
16. पंवार, आर.एस. : मानचित्र विज्ञान एवं प्रायोगात्मक भूगोल, तुलसी प्रकाशन, मेरठ
17. वर्मा एवं लोढ़ा : प्रायोगात्मक भूगोल, राजस्थान हिंदी ग्रंथ अकादमी, जयपुर
18. सिंह एवं कन्नौजिया : प्रायोगात्मक भूगोल की रूपरेखा, सेंट्रल बुक डिपो, इलाहाबाद