

**M.A./M.Sc. Geography**  
**Second Semester**  
**Practical – I (42365 A) Advanced Cartography**

**Unit – I**

- a) Nature, scope & History of cartography
- b) Techniques & Tools of Cartography
- a) Maps and their classification : Distributional maps
- c) Representation of Statistical Data: Diagrams-One, Two, Three Dimensional(3)

**Unit – II**

Geomorphic aspects based on toposheets of 1:50000 or 1:25000 (4 exercise)

- a) Stream orders and basin demarcation
- b) Drainage density and texture
- c) Slope : average slope maps according to Wentworth's method
- d) Profiles : serial, composite, super- imposed, & projected Profiles

**Unit – III**

Climatic aspects (5 exercises)

- a) Rainfall variability graphs
- b) Rainfall dispersion diagram
- c) Ergograph, & Ogilvie's ergograph
- d) Climatograph

**Unit – IV**

Socio-Economic & Demographic aspects - at least with 20 administrative units (4 Exercises)

- a) Population distribution (Dot method)
- b) Density map (Choropleth maps)
- c) Nearest neighbour analysis
- d) Traffic flow cartogram

**Unit – V**

Map projections – Characteristics, use and mathematical  
Constriction along with outline maps of the following projections (5 Exercises)

- a) Bonne's projection
- b) Conical projection – two standard parallel
- c) Gall's projection
- d) Mollweide's projection

Note: Record work will comprise of a minimum of 21 exercises drawn on one fourth of a full drawing sheet and methodological and analytical interpretation of each one.

**Distribution of Marks**

**Total Marks 100**

**A Part – Advance Cartography (40 Marks)**, Practical paper of three hours duration will be held along with main theory paper examination.

Section – A Objective type 5 marks. Asked 10 questions, attempt all questions.

Section – B Short Answers – 20 marks, Asked 10 questions, one question from each unit and attempt five questions.

Section-C Descriptive type-15 marks ,Asked 5 questions, one question from each unit and attempt two questions

**Practical** – Assessed by External Examiner

**B Part – Advance Cartography, (60 marks)**

A Test paper Lab exercise – 30 marks, asked 6 questions, attempt three questions and duration 3 hours.

B - Record work – 20 marks

C - Viva-voce – 10 marks

The Cartographic record work should contain 20 exercises drawn on one fourth of the full drawing sheet.

### References:

1. Arthur G., Advance Practical Geography, Heinemann.
2. Campbell, J., Introductory Cartography, Prentice Hall Inc., New York.
3. Govt. of Rajasthan, District Census Handbooks, latest as well as of previous Census,
4. Keates, J. S., Cartographic Design and Production, Longman, London.
5. Loxton, J., Practical Map Production, John Wiley & Sons, New York.
6. Mishra, R. P. and A. Ramesh, Fundamentals of Cartography, Concept Publishers, New Delhi.
7. Monkhouse, F. J. and H. R. Wilkinson, Maps and Diagrams, Methuen & Co., London.
8. Raisz, E., General Cartography , McGraw Hill Book Co., New York.
9. Robinson, A. H., Elements of Cartography, Chapman & Hall.
10. Sing, R. L., Elements of Practical Geography, Kalyani Publishing.
11. Singh, R. N., Map Work and Practical Geography, Central Book Depot.
- 12- वर्मा, जे. पी. : प्रयोगात्मक भूगोल (रस्तोगी पब्लिशर्स, मेरठ)