

Semester-II

4. MAJOR COURSE –MJ 3 Subject: PRACTICALS-I: (CARTOGRAPHIC TECHNIQUES)

Allotted: 144 Lectures

Course Objective:

The Learning objective of this course are as follows-

- 1. To explain the concept, definition and scope of Geography as a distinct discipline**
- 2. To recognize the various branches, streams and school of thought in Geography**

Sl.	Unit	Topics	Teaching Methodology	Assessment	Outcome
1	Unit 1: 14 Lectures	Scale-Plain, Comparative, Diagonal	<ul style="list-style-type: none"> • Lecture • Digital Classes • Group Discussion • Self-study 	<ul style="list-style-type: none"> • Practical Assignments 	<ul style="list-style-type: none"> • Essential for effective technical drawing and design. • These scales provide the necessary tools to accurately represent measurements, make comparisons, and convey complex spatial relationships.
2	Unit2: 30 Lectures	Cross Profiles- Serial, Superimposed, Projected, Composite; Geological Map/cross-section: 1,2,6,8,10,12,15,17 and completion of geological maps	<ul style="list-style-type: none"> • Lecture • Digital Classes • Group Discussion • Self-study 	<ul style="list-style-type: none"> • Quiz on basic concepts • Practical Assignments 	<ul style="list-style-type: none"> • Serve as a tool to visualize the overall shape and structure of various landforms, helping students to analyze natural processes and make informed decisions based on detailed landform data.
3	Unit3: 30 Lectures	Topographical Map: Introduction, Interpretation, Identification of physical and cultural features	<ul style="list-style-type: none"> • Lecture • Digital Classes • Group Discussion • Self-study 	<ul style="list-style-type: none"> • Quiz on basic concepts • Practical Assignments 	<ul style="list-style-type: none"> • Equip students with the ability to read and understand topographic maps. • Allowing them to accurately identify and analyze both natural (physical) features like mountains, rivers, and valleys, as well as man-made (cultural) features like roads, settlements, and boundaries within a given area, • Effectively visualizing the landscape's three-dimensional structure on a flat map; essentially providing them with a valuable tool for geographical analysis

					and spatial reasoning.
4	Unit4 : 40 Lectures	Projection: Simple Conical (one standard and two standard parallel), Bonne's, Cylindrical (Equal area and equidistant, Gall's Stereographic) Zenithal (Polar Zenithal- Gnomonic and Stereographic Zenithal) Mercator's, Globular, Interpreted Sinusoidal and Mollweide projection	<ul style="list-style-type: none"> • Lecture • Digital Classes • Group Discussion • Self-study 	<ul style="list-style-type: none"> • Quiz on basic concepts • Practical Assignments 	<ul style="list-style-type: none"> • It would equip students with a comprehensive understanding of different map projection types, their strengths and weaknesses in terms of area preservation, shape distortion, and scale variation, allowing them to select the most appropriate projection for specific geographic regions and data visualization needs depending on the desired emphasis on area, distance, or direction.
5	Unit5 30 Lectures	Interpretation of weather maps, drawing of Climograph & Hythergraph	<ul style="list-style-type: none"> • Lecture • Digital Classes • Group Discussion • Self-study 	<ul style="list-style-type: none"> • Quiz on basic concepts • Practical Assignments 	<ul style="list-style-type: none"> • It will equip them with the ability to analyze and understand the climate of a region, • Identify patterns in temperature and precipitation, and ultimately make informed predictions about weather conditions based on visual data representation, proving valuable for fields like geography, environmental science, and meteorology.

Suggested Readings:

1. Misra, R.P.,(2014): Fundamentals of Cartography (Second Revised and Enlarged Edition), Concept Publishing, New Delhi.
2. Monkhouse, F. J. and Wilkinson, H. R.,(1973): Maps and Diagrams, Methuen, London.