

UNIVERSITY OF PUNE
S. Y. B. A.
Gg-201 : FUNDAMENTALS OF GEOGRAPHICAL ANALYSIS
From June 2009

Workload : Six periods per week per batch (12 Students Per Batch)
(Examination for the Course will be conducted at the end of academic year)

Objectives:

1. To enable the students to use various Projections and Cartographic Techniques.
2. To acquaint the students with basic of Statistical data.
3. To acquaint the students with the principles of surveying, its importance and utility in the geographical study.

SECTION I

Sr. No.	Topic	Learning Points	Exercises	No. of periods
1	Maps and Scales	1. Maps : Meaning, definition and Types 2. Map Scale : Definition and Types	1. Map : Meaning, Definition and Types. 2. Map Scale : Definition and Types Conversion of Verbal scale to numeric and vice versa (in British and Metric System) i) Construction of simple graphical scale (Two examples) i) Construction in comparative scale (Two examples)	10
2	Map Projection	1. Definition and need of Map Projection 2. Classification of map projection based on method of construction and developable surfaces used.	1. Zenithal polar projection. i. Zenithal Polar Gnomonic Projection ii. Zenithal Polar Stereographic Projection. 2. Conical Projection : i. Projection with one standard parallel ii. Bonne's Projection 3. Cylindrical Projection i. Cylindrical equal area Projection. ii. Mercator's Projection (Construction of above map projection with properties and uses of each group : one example from each hemisphere).	18
3	Data Representation by various techniques	1. Graphs and Diagrams	1. Simple Line Graph 2. Polygraph 3. Simple Bar Diagram 4. Compound Bar Diagram 5. Pie Diagram (Chart)	18
4	Basic analysis of Statistical Data	1. Population and Sample 2. Statistical Data and Frequency	1. Population, sample, Method of Sampling, Characteristics of Sample 2. Tally mark and frequency table. 3. Frequency distribution (Histogram and Polygon) 4. Cumulative Frequency and Ogive curve.	14

SECTION II				
5	Surveying	1. Directions 2. Definition of Surveying 3. Types of Surveying 4. Measurement of Land	1. Various Methods of deciding North direction True, Magnetic and Grid North 2. plane table survey. i. Radiation Method ii. Intersection methods 4. Prismatic Compass Surveying Methods: i. Open Travers ii. Close Travers 5. Correction bearing and closing of error by Bowditch Method 6. At least experiment of actual measurement of piece of land.	30
6	Relief Representation	1. Qualitative and Quantitative Methods of relief representation 2. Representation of relief by Contours	1. Hachures, Shading, Colour Shading or Tinting. 2. Spot height, Bench Mark (BM), Trig Point, Form Lines and Contours. 1. Types of Slope : Gentle and Steep slope, even and uneven slope, concave and convex slope, terraced slope 2. Land Forms : Conical hill, plateau, ridge, waterfall, river valley, pass, saddle.	10
7	Field Excursion / Village Survey Report	Visit two places of geographical interest anywhere in the country.	One short tour of two days duration and preparation of tour report. OR One long tour more than five days and preparation of tour report	20

Note : 1. Use of stencil, log tables, computer and calculator is allowed.
 2. Journal should be completed and duly certified by practical In-charge and Head of the Department.

Reference Books :

1. Singh Leharaj, (1973) : Map Work and Practical Geography, Central Book Depot – Allahabad
2. Dr. D. Y. Ahirrao and Dr. E. K. Karanjkehele, (2002) : Pratyakshik Bhugol, Sudarshan – Nashik
3. Dr. P. G. Saptarshi and Dr. S. R. Jog, Statistical Methods
4. Dr. S. N. Karlekar, (2008) : Statistical Methods, Diamond – Pune
5. T. P. Kanetkar and S. V. Kulkarni, (1986) : Surveying and Leveling, Pune Vidyarthi Griha Prakashan – Pune
6. Dr. Arjun Kumbhare, Practical Geography