

Devrukh Shikshan Prasarak Mandal's
NYA. TATYASAHEB ATHALYE ARTS, VED. S.R. SAPRE COMMERCE & VID.
DADASAHEB PITRE SCIENCE COLLEGE, DEVRUKH
[AN AUTONOMOUS COLLEGE AFFILIATED TO UNIVERSITY OF MUMBAI]



Syllabus for Third Year Bachelor of Arts

Program: T. Y. B. A.

Semester VI

Course: Geography

Course Code: UAGEO53

**Title of the Course: TOOLS AND TECHNIQUES
IN GEOGRAPHY FOR SPATIAL ANALYSIS-I
(Practical)**

Credit Based Semester and Grading System with the Effect from

Academic Year 2019-20

University of Mumbai
Revised Syllabus w.e.f. Academic Year, 2018-19 (CBSGS)
T.Y.B.A. / T.Y.B.Sc. Geography, Semester – V. Paper No: VI
Subject Title: TOOLS AND TECHNIQUES IN GEOGRAPHY FOR
SPATIAL ANALYSIS-I (Practical)

COURSE CODE: UAGEO53

Credit: 03

Unit -I	Map Projections	Lectures
		09
	1.1. Basic Concepts – Definition, scale, direction, azimuth, graticule, great circle, true meridian, types of projections, choice of projections	
	1.2. Zenithal Polar Projections – Equal Area, Equidistant	
	1.3. Cylindrical Projections - Equal Area, Equidistant	
	1.4. Conical Projections - One standard parallel, two standard parallel	
Unit-II	Map Basic	
	2.1. Basic elements of map and calculation or identification of relief, direction, bearing and distance	09
	2.2. Area calculation with the square method and strip method	
	2.3. Demarcation of the watershed on toposheet, Tracing of stream network and contours	
Unit-III	Survey of India Toposheets	
	3.1. Signs and symbols, marginal information	09
	3.2. Study of physiography, drainage, and vegetation (one full toposheet of hilly and plateau region each)	
	3.3. Study of settlements – size, pattern, utilities (one full toposheet of plains and urban region each)	
	3.4. Study of transport network (one full toposheet of plains and urban area each)	
Unit-III	Preparation of Thematic maps (Manually)	
	4.1. Preparation of a district thematic maps with actual data- Dot and Pictogram	09
	4.2. Preparation of a district thematic maps with actual data- Choropleth and Isopleth	
	4.3. Preparation of a district thematic maps with actual data- Located bar, located circle, and pie chart	
Unit-V	Use of computers in geographical data representation	
	5.1. Construction of line graphs & simple and multiple bar graphs	09

	using MS-excel	
	5.2. Construction of divided bar graphs & pie charts using MS-excel	
	5.3. Preparation of datasheet in SPSS	
	5.4. Calculation of central tendency and standard deviation using SPSS	

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can understand various concepts in statistics, measures of central tendency, dispersion, and deviation, correlation, regression, and hypothesis testing, sampling and field techniques in Geography.

Skills

The student can analyze the socio-economic data using statistical techniques. The student can plan and carry out a field investigation in the locality and provide a solution to tackle the problems in the region.

General competence

The student can apply statistical techniques to solve the day to day problems.

Required Previous Knowledge

Knowledge of the fundamentals of basic mathematics and statistics is required.

Access to the Course

The course is available for all the students admitting for Bachelor of Arts and has opted Geography as an optional course at the first and second-year level.

Forms of Assessment

The pattern assessment will be for 100 marks. 70 marks will be for the examination and 30 marks will be for the timely completion of the practicals and quality of the journal. The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 3.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	1	Solve a question from the following.	14
Q.2	2	Solve a question from the following.	14
Q.3	3	Solve a question from the following.	14
Q.4	4	Solve a question from the following.	14
Q. 5	5	Assessment of the project and Viva	14
Q 6	--	Assessment of the Journal by the External Examiner	10
Q. 7	--	Day to Day completion of the journal- Marks assigned by the subject teacher based on timely completion of the journal.	20
Total			100

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves the right to change the grading scale.

References -

- Ahirrao ani Karanjkehe – प्रात्य सक भ ोर,
- Karlekar Shrikant- प्रात्य सक भ ोर, डायमिंड पब्लरके कन्श
- Karlekar Shrikant- Bhoogol shastratil Sanshodhan Paddhati, डायमिंड पब्लरके कन्श
- Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
- NCERT - Textbook for Class-12, Practical Work in Geography Part II
- Peter A. Rogerson - Statistical Methods for Geography, Sege Publishers -2001
- Robinson A.H. - Elements of Cartography, Wiley
- Sarkar Ashis - Practical Geography, Orient Black Swan – 2015
- Sarkar Ashis –Quantitative Geography, Orient Black Swan – 2013
- Singh R.L. & Singh P. B. - Elements of Practical Geography, Kalyani Publishers 2005
- Stoddard Robert – Field techniques and research methods in geography, Geography