

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: UAGEO63

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

Credit Based Semester and Grading System with the Effect from

Academic Year 2019-20

Course: Geography

Course Code: UAGEO63

Geography Paper No. 3

Credit: 03

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

Unit -I	Nature of data and central tendency	Lectures
	1.1. Meaning and types of data, variable, observation, observation value, simple, discrete data and continuous data	09
	1.2. Frequency Distribution, Histogram, Frequency Polygon and Ogive	
	1.3. Measures of Central Tendency- Mean, Median and Mode	
Unit -II	Dispersion and Deviation	
	2.1. Mean Deviation and Quartile Deviation	09
	2.2. Standard Deviation	
	2.3. Moving Averages (3 years and 5 years)	
Unit-III	Correlation, Regression & Hypothesis Testing	
	3.1. Calculation of correlation coefficient - Pearson's and Spearman's methods	09
	3.2. Regression analysis	
	3.3. Chi-square test	
Unit-IV	Sampling	
	4.1. Sample and sample design in geography	09
	4.2. Point sampling – Systematic and random	
	4.3. Line sampling – Systematic and random	
	4.4. Area sampling – Systematic and random	
Unit-V	Fieldwork in Geography of any one place/village	09
	5.1. Collection of physiographic data – Field observation, field sketching, collection of soil and rock samples, identification of vegetation, etc.	
	5.2. Collection of socio-economic data – interviews, questionnaire the survey, visit the local governing office, NGO's, etc.	
	5.3. Collection of geospatial data – toposheets, aerial photographs, Google images/maps, Bhuvan images, etc.	
	To prepare a geographical report of a place with the help of an available 5.1, 5.2, and 5.3 aspects	

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 right to change the grading scale.

References:

- Ahirrao ani Karanjkehe – प्रात्य सक भ
- Karlekar Shrikant- प्रात्य सक भ ोर, डायमिंड पब्लरके कृन्श
- Karlekar Shrikant- Bhoogol shastratil Sanshodhan Paddhati, डायमिंड पब्लरके कृन्श
- Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
- 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 faculty publication <http://digitalcommons.unl.edu/geographyfacpub/26>