

Academic Council
Item No: _____

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 First Year of M.A./ M. Sc.

Program: M.A./ M. Sc.

Course: Geography

Course Code: PAGEO26

Semester II

**Geography Paper - V: Practical Paper-I (Tools and Techniques of
Spatial Analysis -IV)**

Credit Based Semester and Grading System with the Effect from

Academic Year 2019-20

M.A./ M. Sc. General (Semester Pattern)
First Year M.A./ M. Sc.
Semester-II

Paper Code	Paper	Lectures /Practical	Evaluation Weightage			Credits
			External	Internal	Total	
PAGEO21	Geography Paper-I Oceanography and Hydrology	60 Contact + 60 Notional	70	30	100	04
PAGEO22	Geography Paper-II Geoinformatics	60 Contact + 60 Notional	70	30	100	04
PAGEO23	Geography Paper-III Socio-cultural and Political Geography	60 Contact + 60 Notional	70	30	100	04
PAGEO24	Geography Paper-IV Urban Geography	60 Contact + 60 Notional	70	30	100	04
PAGEO25	Practical components based on 21 and 22: Practical Paper-I Tools and Techniques of Spatial Analysis - III	60 Contact + 60 Notional	100			04
PAGEO26	Practical components based on 23 and 24: Practical Paper-II Tools and Techniques of Spatial Analysis - IV	60 Contact + 60 Notional	100			04

**Syllabus for First Year M.A./ M. Sc. Programme in the subject of Geography
(With effect from the academic year 2019-2020)
Semester-II, Geography Paper – VI: Tools and Techniques of Spatial Analysis II (Based on
Theory Papers: 23 and 24)**

**COURSE CODE: PAGEO26 Credits - 04
(No. of Credits 4 Hours of Practical experience 60+ Notional Hours 60 = Total 120 hours)**

1. Settlement Hierarchy and population studies: (25 Hours)

1.1 Settlement Hierarchy

- a. Nearest neighbour analysis
- b. Population and functional – rank-size rule – application and interpretation -
degree of primacy - Construction- Interpretation – application of triangular
graph

1.2 Application of Statistical and Cartographic Techniques:

- a. Choropleth, Isopleths Dot map and Population Pyramids
- b. Diagrammatic Representation: One, Two and Three Dimensional-Construction
and Interpretation

2. Mental Maps and diagrams (15 Hours)

2.1 Typology of distance and direction of space- Construction of Maps

2.2 Imagining Place and space: Perception – mapping and interpretation.

**2.3 Interpreting the political context of maps, cartographic techniques, diagrams,
pictures, and cartoons.**

3. Statistical Techniques to understand the spatial pattern (20 Hours)

3.1 Index of concentration: location quotient and concentration.

**3.2 Index of similarity and dissimilarity and inequality- Construction and applicability
of Lorenz curve- Interpretations**

3.3 Calculation of Ginni's co-efficient of concentration

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 the settlement hierarchy and techniques of population studies, concepts of mental map and perception in the spatial studies, and various statistical techniques related to the urban geography.

Skills

The student can analyze the data related to social, cultural, political and urban geography. He/She can arrange field investigation in the locality and apply the techniques. It will create scientific temperament among the students.

General competence

The student can apply these techniques for the analysis of the data related to social, cultural, political and urban geography with context to the Konkan region.

Required Previous Knowledge

Knowledge of fundamentals of social, cultural, political and urban geography is necessary before to start to learn the course

Access to the Course

The course is compulsory and it is available for all the students admitting for the Master of Arts in Geography.

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 practical's and quality of the journal. The question paper pattern will be as given below.

External evaluation (100 Marks)
Question Paper Pattern
Time: 5 hours

Note: Solve **any four questions** from question number **1 to 6**.

Q. I	Solve the following practical Problems. (Attempt any four out of six)	60
	1. Solve the following practical problem.	
	2. Solve the following practical problem.	
	3. Solve the following practical problem.	
	4. Solve the following practical problem.	
	5. Solve the following practical problem.	
	6. Solve the following practical problem.	
Q. II	Viva Voce and evaluation of the quality of the journal by the external examiner (10 + 10).	20
Q.III	Evaluation of Journal by the internal examiner based on timely completion and submission	20

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:

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6. Goudie, A. (1981): Geomorphological Techniques, George Alien And Unwin, London.
7. Hammond, R. And McCullagh, P.S., (1974): Quantitative Techniques in Geography: An Introduction, Oxford University Press, London.
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12. Fotheringham, A.S., Brunson, C., Charlton, M : (2000) *Quantitative Geography: Perspectives on Spatial Data Analysis*, Sage Publication Ltd, London,
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