

SHIVAJI UNIVERSITY, KOLHAPUR.



Accredited By NAAC with 'A++' Grade

New Syllabus For

**B. A. Part-III & B. A. B. Ed.
Sem VI**

**Geography (Practical)
(Advanced Tools, Techniques & Field Work in Geography)**

NEP PATTERN

(Subject to the modifications to be made from time to time)
Syllabus to be implemented from June 2024 onwards

New Syllabus for B. A. – III and B. A. B. Ed.

(Introduced from June 2024 Onwards)

New Syllabus for

B. A. (Part III) Geography

Paper No. XIV (Practical Paper -II)

**(ii) Title of Paper - Advanced Tools, Techniques & Field Work in
Geography(100 Marks)**

Module-I: Introduction to Computer

Lectures- 50

Marks-10

1.1 : Introduction to Computer

1.2 : Application of computer in geography

1.2.1 : Construction of Line Graphs, Bar Graphs

1.2.2 : Construction of Pie Diagram and Scatter Diagram

1.3: Application of Excel for Data Analysis

Module-II: Remote Sensing

Lectures- 50

Marks-15

2.1 Definition of Remote Sensing

2.2 Fundamentals of Remote Sensing: EMR, Sensors and Platforms

2.3 Application of Remote Sensing in Geography

2.4 Aerial photographs and Satellite imagery: Definition, types and difference
between them

2.5 Determination of Photo Scale

2.6 Elements of image interpretation

2.7 Identification of Physical and cultural features from Aerial Photographs or
Satellite Imagery

Module-III: GIS and GNSS

Lectures- 50

Marks-15

3.1 Geographical Information System (GIS)

3.1.1 Definition and components

3.1.2 GIS Data Structure: Types (spatial and non-spatial), Raster and Vector data

3.1.3 Georeferencing, Digitization, Map Layout Preparation

3.1.4 Application of GIS in Geography: Land use or Land Cover, Urban Sprawl Analysis, Forests Monitoring

3.2 Global Navigation Satellite System

3.2.1 Definition and components

3.2.2: GPS and its applications in Geography

3.2.3 Field work in GPS: Determining latitude, longitude and altitude

3.3: Exercise with Google earth Program.

Module-IV: Statistical methods and techniques

Lectures- 60

Marks-10

4.1 Measures of Central Tendency: Mean, Median and Mode

4.2 Dispersion: Mean Deviation and Standard Deviation

4.3 Association and Correlation: Karl Pearson's Method (Product Moment)

4.4 Analysis of Time Series: Semi-average Method

Module-V: Surveying

Lectures- 60

Marks-15

5.1 Introduction to Survey: Meaning and types

5.2 Preparation of plans of the given area with the following survey method

(Any one methods among them)

A- Plane Table survey (Radial, Intersection, and Traverse method)

B- Dumpy Level survey

C- Theodolite survey

D- Total Station

E- Abony Level Survey

f- Introduction to DGPS

5.3 Preparation of plans Prismatic compass survey (Radical, Intersection and Traverse method)

5.3.1 Types and conversion of bearings.

5.3.2 Correction of bearing.

Module-VI: Project work based on field work any one of following:

Marks-15

Resource survey, Population survey, Agricultural survey, Settlement Survey,

Environmental issues, Industrial visit, Health survey, Natural Hazard or Disaster

1. Project Report must be content of following points:

- Introduction – Aims – Objectives - Review of the literature - Data collection –
Methodology - Data Analysis – Interpretation - Findings – Suggestions - Bibliography
2. The duration of the field work should not exceed than 20 days.
 4. The word count of the report should be about 8000 to 12,000 excluding figures, tables, photographs, maps, references and appendices.
 5. One copy per student of the report as per research standard should be submitted at the time of examination.

Module- VII: Study Tour

Marks-10

Maximum 15 days of Study Tour and preparation of Tour Report.

The Study Tour Report must be content of following points:

Introduction – Necessity – Importance - Route map – Objectives – Methodology -
Geographical Profile (Natural, Socio-economic and Cultural) - Geographical importance of
visited tourist places – Conclusion – References

Journal and Viva Voce

Marks 10

Note :

1. Use of stencils, 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:

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