SHIVAJI UNIVERSITY, KOLHAPUR.

Accredited By NAAC with 'A++' Grade

New Syllabus For

B. A. Part-III & B. A. B. Ed.

Geography (Practical)

(Fundamentals of Map Making and Map Interpretation)

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 and B. A. B. Ed. Geography

Paper No. XIII (Practical Paper -I) Sem-V

Title of Paper: Fundamentals of Map Making and Map Interpretation

Module – I: Introduction to Map and Scales: Periods 50

Marks 15

1.1 Map

1.1.1 Map: Definition and Elements

1.1.2 Classification of Maps: Based on Scale and Purpose

1.2 Scale

1.2.1 Meaning and Definition,

1.2.2 Methods of Representation of scale - Verbal, Numerical and Graphical.

1.2.3 Scale Conversion

1.2.4 Construction of Graphical Scale –

i) Simple (Plane Scale)

ii) Time and Distance Scale

iii) Diagonal Scale

Module II: Map Projection Periods 50

Marks 15

2.1 Definition, Classification of Projections:

a) Based on the methods of Construction: Perspective and Non-perspective

b) Based on Developable Surface used: Conical, Cylindrical, Zenithal, Conventional.

c) Based on Position of Tangent Surfaces: Polar, Equatorial (normal), Oblique.

d) Based on Position of view point or light: Gnomonic, Stereographic, Orthographic

e) Based on Preserved qualities: i) Equal area projection (Homolographic)

ii) Orthographic Projection

iii) Azumuthal Projection (True BearingProjection)

2.2 Graphical Construction of the following Projections with Properties and Use:

i) Zenithal Polar Gnomanic Projection

ii) Zenithal Polar Equal Area Projection

iii) Simple Conical Projection with one standard Parallel

iv) Cylindrical Equal Area Projection

v) Mercator's Projection and Reference to Universal Transverse Mercator (UTM) Projection

Module – III : Identification, Mapping of Slope, Relief Features and Profiles

Periods 50

Marks 15

3.1 Slope and Gradient

3.1.1 Types of Slope: Gentle, Steep, Even, Uneven, Convex, Concave, Terraced.

3.1.2 Expression of Slopes: a) Gradient b) Degree c) Per Cent d) Mills

3.1.2 Representation of Relief by Contours: Hill, Mountain, Ridge, Cliff, Saddle, Plateau, Knoll, Spur, Col or Pass, Volcanic Col or Crater, Gorge, 'V' Shaped Valley, Waterfall, 'U' Shaped Valley, Cirque, Hanging Valley, Ria Coast, Fiord Coast, Sea cliff.

3.2 Profiles

3.5.1 Superimposed Profile

3.5.2 Composite Profile

3.5.3 Projected Profile

3.5.4 Longitudinal Profile

Module – IV : Topographical Maps **Periods 50**

Marks 15

4.1 Indexing of S.O.I. Topographical Map

4.2 Signs, Symbols and Colors used in SOI Toposheet

4.3 Interpretation of S.O.I.'s Topographical Maps

a) Marginal Information

b) Physical environment: Relief, Drainage and Vegetation

c) Cultural environment: Settlements, Transportation and Communication, Irrigation.

d) Land Use

Module V: Weather Instruments and IMD Maps **Periods 70**

Marks 20

5.1 Study of weather Instruments with reference to Principle, Mechanism, and Function

a) Thermograph

b) Barograph

c) Dry and Wet Bulb Thermometer

d) Cup Anemometer

e) Rain Gauge

5.2 Isobaric Patterns: Cyclone, Anticyclone, Col, Ridge, Secondary Depression

5.3 Signs and Symbols used in Indian Daily Weather Maps

5.4 Interpretation of Indian Daily Weather Maps

Marginal Information, Pressure, Winds, Clouds, Rainfall, Other Conditions, Sea Condition, Temperature departure from normal

Module VI : Representation Techniques of Statistical Data **Periods 30**

Marks 10

a) Divided Rectangle

b) Proportional Circle

c) Proportional Square

d) Choropleth Map

e) Isopleths

f) Scatter Plots

Module VII: 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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5. Monkhouse F.J. and Wilkison, H.R.: Maps and Diagrams, Mathuen. London, 1971.
6. Negi. , Dr. Balbir Singh : Practical Geography, Kedar Nath Ram Nath, Meerut, Delhi.
7. Raisz, E.: Principals of Cartography, McGraw Hill Book Com., Inc, New York, 1962.
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10. Sarkar, Ashis : Practical Geography: A systematic Approach, Orient Longman limited, Calcutta, 1997.
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12. Singh, R and Kanaujia, L.R.S.: Map Work and Practical Geography, Central Book Depot, Allahabad.
13. Singh, R. L. and Rana P.B. : Elements of Practical Geography, Kalyani Publishers, New Delhi – Ludhiana, 1998.
14. Aher A. B., Chodhari A. P. & Bharambe S. N. Techniques of Spatial Analysis Prashant Publication Jalgaon 2015
15. Maurice Yeats, An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, New York, 1974.
16. P. Saha and P. Basu (2006): Advanced Practical Geography, Books and Allied Publication, Kolkata, India.
17. Khullar, Essentials of Practical Geography, New Academic Publishing Co, India.
18. Singh L R (2011): Fundamentals of Practical Geography
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