

**Punyashlok Ahilyadevi Holkar Solapur University, Solapur**



**Name of the Faculty: Science & Technology**

**CHOICE BASED CREDIT SYSTEM**

**Syllabus: Geography**

**Name of the Course: B. A. /B. Sc. Part- III (Sem. V & VI)**

**(Syllabus to be implemented from June 2024)**

**Punyashlok Ahilyadevi Holkar Solapur University, Solapur**  
**Choice Based Credit System (CBCS) (w.e.f. June 2024)**

**Revised Structure for B.A. III**

| <b>Semester V</b>                       |             |                 |                                                                              |           |           |                    |                        |               |
|-----------------------------------------|-------------|-----------------|------------------------------------------------------------------------------|-----------|-----------|--------------------|------------------------|---------------|
| <b>Sr. No.</b>                          | <b>Code</b> | <b>Paper No</b> | <b>Name of the paper</b>                                                     | <b>CA</b> | <b>UA</b> | <b>Total Marks</b> | <b>Lectures / week</b> | <b>Credit</b> |
| 1                                       | DSC 7       | VII             | Regional Planning and Development                                            | 10        | 40        | 50                 | 04                     | 04            |
| <b>Select Any One</b>                   |             |                 |                                                                              |           |           |                    |                        |               |
| 2                                       | DSE 1A      | VIII            | Urban Geography                                                              | 10        | 40        | 50                 | 04                     | 04            |
| 3                                       | DSE 1B      | VIII            | Agriculture Geography                                                        | 10        | 40        | 50                 | 04                     | 04            |
| <b>Select Any One</b>                   |             |                 |                                                                              |           |           |                    |                        |               |
| 4                                       | DSE 2A      | IX              | Resource Geography                                                           | 10        | 40        | 50                 | 04                     | 04            |
| 5                                       | DSE 2B      | IX              | Population Geography                                                         | 10        | 40        | 50                 | 04                     | 04            |
| <b>Semester VI</b>                      |             |                 |                                                                              |           |           |                    |                        |               |
| 6                                       | DSC 8       | X               | Evaluation of Geographical Thought                                           | 10        | 40        | 50                 | 04                     | 04            |
| <b>Select Any One</b>                   |             |                 |                                                                              |           |           |                    |                        |               |
| 7                                       | DSE 3A      | XI              | Geography of Health and Well being                                           | 10        | 40        | 50                 | 04                     | 04            |
| 8                                       | DSE 3B      | XI              | Political Geography                                                          | 10        | 40        | 50                 | 04                     | 04            |
| <b>Select Any One</b>                   |             |                 |                                                                              |           |           |                    |                        |               |
| 9                                       | DSE 4A      | XII             | Hydrology and Oceanography                                                   | 10        | 40        | 50                 | 04                     | 04            |
| 10                                      | DSE 4B      | XII             | Social Geography                                                             | 10        | 40        | 50                 | 04                     | 04            |
| <b>Annual</b>                           |             |                 |                                                                              |           |           |                    |                        |               |
| 11                                      | DSC 9       | Practical P. I  | Map Making and Map Interpretation                                            | 20        | 80        | 100                | 10                     | 08            |
| 12                                      | DSC 10      | Practical P. II | Advanced Tools, Techniques (Computer, Remote Sensing, GIS, GPS) & Field Work | 20        | 80        | 100                | 10                     | 08            |
| <b>Select Any One Short Term Course</b> |             |                 |                                                                              |           |           |                    |                        |               |
| 1                                       | SEC 1       | -               | A Certificate Course in Land Survey                                          | 10        | 40        | 50                 |                        | 04            |
| 2                                       | SEC 2       | -               | A Certificate Course Travel and Tourism                                      | 10        | 40        | 50                 |                        | 04            |
| 3                                       | SEC3        | -               | A Certificate Course in QGIS                                                 | 10        | 40        | 50                 |                        | 04            |

**PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR**  
**Bachelor of Arts (B. A.)**

**B. A. Part - III**

**Regional Planning and Development**

Syllabus to be implemented from June 2024 onwards

1. **Title :** Regional Planning and Development
2. **Year of Implementation:** Revised Syllabi will be implemented from June 2024 onwards.
3. **Preamble:** Regional Planning is the need of time to everyone. Geography subject can lead to the development of human activities through regional planning. In the process of development of geography, the changing nature of subject will make aware to the students about the recent technologies used in geography. This will further help to improve the use of geographical techniques and methods in teaching, learning and research work through regional planning.
4. **Objectives:**
  - To Familiarize the student with the types of region and types of Regional Planning and Delineation of planning region.
  - To Familiarize the student with the theory and models of regional planning
  - To get familiar with indicators of measurement of development.
5. **Course Outcomes:**

After the completion of course, the students will have ability to:

  - The students were known the importance of regional planning.
  - The students understood the concepts of region, regionalization, regional planning & development and detailed knowledge of region.
  - The students were familiar with indicators of measurement of development.
  - Detail understanding of Growth Pole Model, Center place Theory and Growth Foci Model in Indian context.
6. **Pattern of Exam:** Semester
7. **Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers                   | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|-----------------------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                                   | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Regional Planning and Development | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper                       | Old paper No.       | Title of New paper                       | New Paper No.       |
|---------|------------------------------------------|---------------------|------------------------------------------|---------------------|
| 1.      | <b>Regional Planning and Development</b> | <b>DSC 7 OR VII</b> | <b>Regional Planning and Development</b> | <b>DSC 7 OR VII</b> |

**NEW/REVISED SYLLABUS FOR  
B. A. Part-III Geography (Introduced from June 2024 onwards)  
Semester – V**

- i. **DSC 7 OR Paper No. VII**
- ii. Title of Paper: **Regional Planning and Development**

**Unit I: Region and Regional Planning 15**

- 1.1 Concept of Region
- 1.2 Types of Region : (Formal and Functional)
- 1.3 Need of Regional Planning
- 1.4 Types of Regional Planning

**Unit II: Delineation of Planning Region 15**

- 2.1 Choice of Region for Planning
- 2.2 Characteristics of Ideal Planning Region
- 2.3 Delineation of Planning Region
- 2.4 Planning Regions of India

**Unit III: Theories and Models for Regional Planning 15**

- 3.1 Growth Pole Model of Perroux
- 3.2 Centre Place Theory of Walter Christaller

**Unit IV: Measuring of Development. 15**

- 4.1 Indicators of Economic Development

#### 4.2 Indicators of Social Development

#### 4.3 Indicators of Environmental Development

#### 4.4 Human Development index

#### **References:**

- Blij H.J. (Dec.1971):,Geography: Regional and Concept, Johan Wiley and Sons.
- Cloud P.I. (1998), An Introduction to Regional Geography, BlackWell Publication, Oxford and Massachusetts.
- Friedemann J.&Alonson W.(1964): Regional Development and Planning, MIT Press, Cambridge.
- Gore C.G. (1984): Regions in Question: Space Development Theory and Regional Policy, Methuen London.
- Gore C.G., Kohler G., Rich U.P. &Ziesemer T. (1996) :Quetioning Development, Essay on the Theory, Policies and Practice of Development Intervetion, Motropolis-Verlaje, Marburg.
- Peet R. (1999) :Theories of Development, Guilford Press, New York.
- Alden J. & Morgan (1974) :Regional Planning A Comprehensive view, Leonard Hill Books.
- Chand M. &Puri V. (1983): Regional Planning in India, Allied Publisher Ltd., New Delhi.
- Chandana R.C. (2000): Regional Planning & Development, Kalyani Publishers, Ludhiyana.
- Cook P. (1983): Theories of Planning & Spatial Development, Hutchinson & Com. Ltd. London.
- Glasson, John (1974): An Introduction to Regional Planning, Hutchinson Educational London.
- Misra R.P., Sundaram K.V. & Rao, etd.(1974): Regional Development Planning in India.
- Misra R.P (1992): Regional Planning, Concept Publishing Com. New Delhi.

**PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR**  
**Bachelor of Arts (B. A.)**  
**B. A. Part - III Urban Geography**  
Syllabus to be implemented from June 2024 onwards

1. **Title :** Urban Geography
2. **Year of Implementation:** Revised Syllabi will be implemented from June 2024 onwards.
3. **Preamble:** The Board of studies should briefly mention foundation, core and applied Components of the course/ Paper. The student should get into the prime objectives and expected level of study with required outcome in terms of basic and advance knowledge at examination level.
4. **Objectives:**
  - To study the basics of urban Geography.
  - To study the type of urban Settlements, site and situations.
  - To get as ideas of relationship between human activities and urban development.
  - To make the students capable for handling the present problematic situation in urban development.
  - To make students as a good urban planner and environmental conservator.
5. **Course Outcomes:**

After the completion of course, the students will have ability to:

- The students were known the importance of urban settlements through urban geography.
- The students understood the types of urban Settlements, Site and situations.
- The students were familiar with an idea of relationship between human activities and urban development.

- Detail understanding of students regarding present urban problems and students are capable to handling of present problematic situations in urban areas.
- The students are developed as a good urban planner and environmental conservator.

**6. Pattern of Exam: Semester**

**7. Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|-----------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                 | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Urban Geography | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper | Old paper No. | Title of New paper | New Paper No.  |
|---------|--------------------|---------------|--------------------|----------------|
| 1.      | DSE 1A OR VIII     | VIII          | Urban Geography    | DSE 1A OR VIII |

**NEW/REVISED SYLLABUS FOR**

**B. A. Part-III Geography (Introduced from June 2024 onwards)**

**Semester – V**

**i. DSE 1A OR Paper No. VIII**

**ii. Title of Paper: Urban Geography**

**Unit I: Introduction to Urban Geography**

**15**

1.1. Meaning and definition of Urban Geography

1.2 Nature and scope of Urban Geography

1.3 Approaches of Urban Geography

1.4 Significance of Urban Geography

**Unit II. Patterns of Urbanization**

**15**

2.1 Meaning of urban settlement and Urbanization

2.2 Concept and factors of urbanization

2.3 Patterns of Urbanization in developed and developing countries

### **Unit III. Function, Structure and Morphology of Urban centers**

**15**

3.1 Functional classification of town and cities

3.2 Structure and morphology of urban centers

3.3 City Regions and C.B.D.

3.4 Models of urban Morphology; The Concentric Zone Theory, The Sector Theory and the Multi-Nuclei Theory

### **Unit IV. Urban Issue and Case studies**

**15**

4.1 Problems of housing and growth of slums

4.2 Issues of civic amenities (Water and Transport)

4.3 Problems of environmental pollution

4.4 Case studies of Solapur smart city and Pandharpur town (with reference to Land use and Urban Issues)

#### **References:**

- Fyfe N. R. and Kenny J. T., 2005: The Urban Geography Reader, Routledge.
- Graham S. and Marvin S., 2001: Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition, Routledge.
- Hall T., 2006: Urban Geography, Taylor and Francis.
- Kaplan D. H., Wheeler J. O. and Holloway S. R., 2008: Urban Geography, John Wiley.
- Knox P. L. and McCarthy L., 2005: Urbanization: An Introduction to Urban Geography, Pearson Prentice Hall New York.
- Knox P. L. and Pinch S., 2006: Urban Social Geography: An Introduction, Prentice-Hall.
- Pacione M., 2009: Urban Geography: A Global Perspective, Taylor and Francis.
- Ramachandran R (1989): Urbanisation and Urban Systems of India, Oxford University Press, New Delhi
- Ramachandran, R., 1992: The Study of Urbanisation, Oxford University Press, Delhi
- Singh, R.B. (Eds.) (2001) Urban Sustainability in the Context of Global Change, Science Pub., Inc., Enfield (NH), USA and Oxford & IBH Pub., New Delhi.
- Singh, R.B. (Ed.) (2015) Urban development, challenges, risks and resilience in Asian meg



**PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY,  
SOLAPUR**

**Bachelor of Arts (B. A.)**

**B. A. Part - III Agriculture Geography**

Syllabus to be implemented from June 2024 onwards

1. **Title :** Agriculture Geography
2. **Year of Implementation:** Revised Syllabi will be implemented from June 2024 onwards.
3. **Preamble:** Agricultural Geography is the most and comparatively developed branch of Economic Geography. The present syllabus of this paper includes Nature and Scope of Agricultural Geography, Agricultural determinants, Land use Theory and Agricultural Practices, agricultural concepts like crop combination and productivity, impact of Green revolution and the modern technology used in agriculture. This study will help in making aware the students to the use of modern technologies which are used in agriculture.
4. **Objectives:**
  - To help students to know the approaches to study agriculture geography.
  - To study the methods of regionalization of agriculture.
  - To provide in depth knowledge about agriculture geography.
5. **Course Outcomes:**

After the completion of course, the students will have ability to:

- The students will know the importance and modern techniques of Agricultural geography.
- The students understood the factors affecting on agriculture.
- The students were familiar with agriculture theories, green revolution and problems associated with agriculture

6. **Pattern of Exam:** Semester

7. **Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers       | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|-----------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                       | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Agriculture Geography | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper    | Old paper No. | Title of New paper    | New Paper No. |
|---------|-----------------------|---------------|-----------------------|---------------|
| 1.      | Agriculture Geography | DSE 1B OR IX  | Agriculture Geography | DSE 1B OR IX  |

**NEW/REVISED SYLLABUS FOR**

**B. A. Part-III Geography (Introduced from June 2024 onwards)**

**Semester – V**

**i. DSE 1B Paper No. IX**

**ii. Title of Paper: Agriculture Geography**

**Unit I: Introduction to agriculture Geography 15**

1.1 Definition, Nature and Scope of Agriculture Geography

1.2 Importance of Agriculture

1.3 Modern Techniques in Agriculture

**Unit II: Determination of Agriculture 15**

2.1 Physical

2.2 Economical

2.3 Social

2.4 Cultural

**Unit III: Agriculture Regions of India 15**

3.1 Agro-Climatic regions

3.2 Agro-Ecological regions

3.3 Crop-Combination, Crop-Diversification

**Unit IV: Agricultural Land use theory 15**

4.1 Von Thunen Theory of Agricultural land use

4.2 Green and white revaluation in India

4.3 Agricultural problem and prospects in India - Physical and non-Physical

**References:**

- Bayliss Smith, T.P.: The Ecology of Agricultural Systems. Cambridge University Press, London. 1987.
- Gregor, H.P.: Geography of Agriculture. Prentice Hall, New York, 1970.

- Grigg, D.B.: The Agricultural Systems of the World, Cambridge University Press, New York. 1974.
- Fulle S.J.: KrushiBhugol; VidhyabhartiPrakashanLatur, 2000.
- Bhatt, M.S. (ed.) 2004: Poverty and Food Security in India Problems and Policies. Akkar Books, New Delhi.
- Morgan W.B. & Muton R.C.(1971): Agricultural Geography, Mathuen, London.
- Singh Jasbir& Dhillon S.S. (2004): Agricultural Geography, Tata Mc-Graw Hill Education, New Delhi.
- Bhatia B.M. (1977): Socio-Economic Growth, Vikas New Delhi.
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- Shafi M. (1983): Agricultural Productivity and Regional Imbalances a Study of Uttar Pradesh, Concept, New Delhi.
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**PUNYASHLOK AHILYADEVJI HOLKAR SOLAPUR UNIVERSITY,  
SOLAPUR  
Bachelor of Arts (B. A.)**

**B. A. Part - III Population Geography**

Syllabus to be implemented from June 2024 onwards

1. **Title :** Population Geography
2. **Year of Implementation:** Revised Syllabi will be implemented from June 2024 onwards.
3. **Preamble:** This curriculum focuses on the understanding of core and fundamental branches of the discipline. This paper is specially designed to learn the role of demography and population studies as a distinct field of human geography. It encompasses sound knowledge of key concept, different components of population. The curriculum has been carefully designed to include conceptual, basic themes, population dynamics and characteristic with contemporary issues.
4. **Objectives:**
  - To study the basics of population geography.
  - To study the population growth trends and its distribution.
  - To study the population dynamics and various theories of population.
  - To study the population compositions and its characteristics.
5. **Course Outcomes:**

After the completion of course, the students will have ability to:

  - This paper would bring an understanding of population geography along with relevance of demographic data.
  - The students would get an understanding of distribution and trends of population growth in the developed and less developed countries, along with population concepts.
  - The students would get an understanding of the dynamics of population.
  - An understanding of the implications of population composition in different regions of the world.
  - An appreciation of the contemporary issues in the field of population studies
6. **Pattern of Exam:** Semester

## 7. Scheme of Teaching & Examination

| Sr. No. | Subjects/Papers      | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|----------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                      | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Population Geography | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

## 8. Equivalence in accordance with titles and contents of papers (For revised papers)

| Sr. No. | Title of Old Paper          | Old paper No.       | Title of New paper          | New Paper No.       |
|---------|-----------------------------|---------------------|-----------------------------|---------------------|
| 1.      | <b>Population Geography</b> | <b>DSE 2A OR IX</b> | <b>Population Geography</b> | <b>DSE 2A OR IX</b> |

### NEW/REVISED SYLLABUS FOR B. A. Part-III Geography (Introduced from June 2024 onwards) Semester – V

- i. **DSE 2A OR Paper No. IX**
- ii. Title of Paper: **Population Geography**

#### **Unit I: Introduction to Population Geography 15**

- 1.1. Definition of population geography
- 1.2 Nature and Scope of population Geography
- 1.3 Significance of population Geography
- 1.4 Sources of population data (Census, Statistical abstract, NSS)

#### **Unit II: Population Growth and Distribution 15**

- 2.1 Growth of World population
- 2.2 Factors affecting the distribution of population
- 2.3 Population distribution in the world
- 2.4 Theories of population Growth: Malthus Theory and Demographic Transition Theory

#### **Unit III: Population Dynamics 15**

- 3.1 Concept of population Dynamics
- 3.2 Fertility: Causes, Effects and Measures
- 3.3 Mortality: Causes, Effects and Measures
- 3.4 Migration: Types, causes and effects, Major international migration of the world after World War II

## **Unit IV: Population Composition and Characteristics**

15

4.1 Age-Sex Composition Causes, Effects, Measures and Characteristics

4.2 Rural and Urban Composition Causes, Effects, Measures and Characteristics

4.3 Literacy: Effects and Characteristics

4.4 Contemporary Issues: HIV/ AIDS and Covid 19

### **References:**

- Barrett H. R., 1995: Population Geography, Oliver and Boyd.
- Bhende A. and Kanitkar T., 2000: Principles of Population Studies, Himalaya Publishing House.
- Chandna R. C. and Sidhu M. S., 1980: An Introduction to Population Geography, Kalyani Publishers.
- Clarke J. I., 1965: Population Geography, Pergamon Press, Oxford.
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- MOOCS - NPTEL: <https://nptel.ac.in/>
- MOOCS - SWAYAM: <https://swayam.gov.in/>
- National Digital Library of India: <https://ndl.iitkgp.ac.in/>

**PUNYASHLOK AHILYADEVI HOLKAR  
SOLAPUR UNIVERSITY, SOLAPUR  
Bachelor of Arts (B. A.)**

**B. A. Part - III Resource Geography**

Syllabus to be implemented from June 2024 onwards

1. **Title :** Resource Geography
2. **Year of Implementation :** Revised Syllabi will be implemented from June 2024 onwards.
3. **Preamble:** Resource Geography is a major and developing branch of Economic Geography. The world countries are trying to make overall development with blindly utilizing different resources. The growing population exerts its pressure on present resources which generates various problems in front of countryside. The present syllabus of this paper includes Definition, Scope, concept, classification and significance of Resource Geography. It also includes major natural resources such as water, forest, energy and human resources with its distribution, utilization and problems. Newly evolved concept sustainable development is also studied with said resources.
4. **Objectives:**
  - To understand the concept and classification of Resources.
  - To examine the major resources (water, forest, energy and human) with their distribution, utilization and problems.
  - To study the sustainable resource development.
5. **Course Outcomes:**

After the completion of course, the students will have ability to:

  - The students were known the importance of Resources.
  - The students were familiar with distribution, utilization and problems of resources like water, forest, energy and human.
  - Detail understanding the sustainability of natural resource development.
6. **Pattern of Exam:** Semester
7. **Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers    | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|--------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                    | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Resource Geography | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper | Old paper No. | Title of New paper | New Paper No. |
|---------|--------------------|---------------|--------------------|---------------|
| 1.      | Resource Geography | DSE 2B OR IX  | Resource Geography | DSE 2B OR IX  |

**NEW/REVISED SYLLABUS FOR  
B. A. Part-III Geography (Introduced from June 2024 onwards)  
Semester – V**

**i. DSE 2B OR Paper No. IX**

**ii. Title of Paper: Resource Geography**

**Unit I: Introduction to Resource Geography** **15**

1.1 Definition, Nature, and Scope of Resource Geography.

1.2 Concept and Classification of Resource.

1.3 Importance of Resource.

**Unit II. Natural Resource** **15**

2.1 Soil Resource – Distribution, Utilization, Problems and Conservation.

2.2 Water Resources-Distribution, Utilization, Problems and Conservation.

2.3 Forest Resource-Distribution, Production, Problems and Conservation.

**Unit III. Energy Resource** **15**

3.1 Conventional Resource-Distribution, Utilization, Problems and Conservation.

3.2 Non-Conventional Resource-Distribution, Utilization, Problems and Conservation.

**Unit IV: Sustainable Resource development** **15**

4.1 Concept of sustainable Resource Development.

4.2 Sustainable Natural Resource Development- Land, Water, Forest, Energy.

4.3 Human Resource Development

**References:**

- Cutter S. N., Renwich H. L. and Renwick W., 1991: Exploitation, Conservation, Preservation: A Geographical Perspective on Natural Resources Use, John Wiley and Sons, New York.
- Gadgil M. and Guha R., 2005: The Use and Abuse of Nature: Incorporating This Fissured Land: An Ecological History of India and Ecology and Equity, Oxford University Press. USA.
- Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: Natural Resources: Ecology, Economics and Policy, Prentice Hall, New Jersey.
- Jones G. and Hollier G., 1997: Resources, Society and Environmental Management,



Paul Chapman, London.

- Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.
- Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.
- Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.
- Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.

**PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR  
UNIVERSITY, SOLAPUR**

**Bachelor of Arts (B. A.)**

**B. A. Part - III**

**Evolution of Geographical Thought**

Syllabus to be implemented from June 2024 onwards

1. **Title :** Evolution of Geographical Thought
2. **Year of Implementation:** Revised Syllabi will be implemented from June 2024 onwards.
3. **Preamble:** This paper is basically designed to cater to foundation building of the students by imparting knowledge about the pillars of geography. It encompasses the evolution of the subject right from the experiences and understanding of travelers and explorers to the progression towards establishment of the discipline geography in sciences
4. **Objectives:**
  - To study the evolution of geographic thought.
  - To evaluating the contemporary trends in geographical studies.
  - To understands the debates in the geographical studies.
  - To study the recent trends in geography
5. **Course Outcomes:**
  - Students were able to visualize the basic theme, ideas and approaches of geographic knowledge with relation to historical juncture, varying schools and era of their emergence.
  - Detailed knowledge about the debates in the geographical studies.
  - Understanding of recent trends in Geography.
6. **Pattern of Exam :** Semester
7. **Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers                   | Teaching Scheme<br>Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|-----------------------------------|------------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                                   | L                            | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Evolution of Geographical Thought | 04                           | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper                       | Old paper No.     | Title of New paper                       | New Paper No.     |
|---------|------------------------------------------|-------------------|------------------------------------------|-------------------|
| 1.      | <b>Evolution of Geographical Thought</b> | <b>DSC 8 OR X</b> | <b>Evolution of Geographical Thought</b> | <b>DSC 8 OR X</b> |

**NEW/REVISED SYLLABUS FOR  
B. A. Part-III Geography (Introduced from June 2024 onwards)  
Semester – VI**

**i. DSC 8 OR Paper No. X**

**ii. Title of Paper: Evolution of Geographical Thought**

**Unit I: History of Geographical Idea** **15**

1.1 Ancient period – contribution of Greek, Roman and Indian Geographers

1.2 Medieval period – Arab Geographers

**Unit II: Schools of Geography** **15**

2.1 German School of Geography – Humboldt, Ritter & Ratzel

2.2 French School of Geography – Vidal-de-la-Blache

2.3 American School of Geography – Ellen Semple

2.4 British School of Geography – Mackinder

**Unit III: Dichotomy in Geography** **15**

3.1 Environmental Determinism Vs Possibilism

3.2 Physical Vs Human Geography

3.3 Systematic Vs Regional Geography

**Unit IV: Development of Geography after World War II** **15**

4.1 Quantitative revolution in Geography concept, objectives and merits

4.2 Impact of Quantitative revolution in Geography.

4.3 Perspectives in Geography: Behaviouralism, Humanism, Systems Approach, Radicalism

**References:**

- Hartshorne Richard (1959) - Perspective on the nature of Geography Rand McNally & Co., New York
- Dixit R.D. - Geography Thought: A contextual history of Idea
- Dickinson R.E. - Makers of Modern Geography
- Taylor Griffith - Geography of 20th Century
- Sudipta Adhikari: History of Geographical Thought
- Harvey David (1980) - Explanation in Geography Edward - Arnold Landon
- Husain Majid (1984) - Evolution of Geographical Thought Rawat Publication, Jaipur
- खतीब के . ए. व भ ांजे बी. एम- भूवज्ञ न ववक स, सांजोग प्रक शन, कोल्ह पूर.

**PUNYASHLOK AHILYADEVJI HOLKAR SOLAPUR UNIVERSITY,  
SOLAPUR**

**Bachelor of Arts (B. A.)**

**B. A. Part - III Geography of Health and Wellbeing**

Syllabus to be implemented from June 2024 onwards

- 1. Title : Geography of Health and Wellbeing**
- 2. Year of Implementation :** Revised Syllabi will be implemented from June 2024 onwards.
- 3. Preamble:** Geography of Health and Wellbeing considers the significance for physical and mental health of interactions between people and their environment. This branch of Geography becomes popular due to its significance. In this course the fundamental concepts and knowledge of Geography of Health and wellbeing have been included. The present syllabus of this course includes perspectives of health, pressure on environmental quality and health, exposure and health risks, health and disease patterns.

**4. Objectives:**

- To study the awareness about the health and wellbeing.
- To evaluating the contemporary trends in geographical studies.
- To understands the debates in the geographical studies.
- To understands the curiosity about disease and health.

**5. Course Outcomes:**

After the completion of course, the students will have ability to:

- Understand various geographical perspectives related to human health.
- Create awareness of human health and environment.
- The students are familiar with geographical background of diseases and their regional pattern.
- Detail understanding of pressure on environmental quality and human health.
- The students are familiar with the process of health care planning in India.
- The students are aware about impact of climate change on human health.

**6. Pattern of Exam: Semester**

**7. Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers                   | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|-----------------------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                                   | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Geography of Health and Wellbeing | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper                | Old paper No. | Title of New paper                | New Paper No. |
|---------|-----------------------------------|---------------|-----------------------------------|---------------|
| 1.      | Geography of Health and Wellbeing | DSE 3A OR XI  | Geography of Health and Wellbeing | DSE 3A OR XI  |

**NEW/REVISED SYLLABUS FOR  
B. A. Part-III Geography (Introduced from June 2024onwards)  
Semester – VI**

- i. DSE 3A OR Paper No. XI**
- ii. Title of Paper: Geography of Health and Wellbeing**

**Unit I: Perspectives on Health: 15**

- 1.1 Definition and scope
- 1.2 Linkages with environment and development
- 1.3 Health and Environmental trends: Population dynamics, urbanization, poverty and inequality

**Unit II: Pressure on Environmental Quality and Health 15**

- 2.1 Human activities and its pressure on environment and Health
- 2.2 Land use and agricultural development
- 2.3 Industrialization
- 2.4 Transport

**Unit III: Exposure and Health Risks 15**

- 3.1 Air pollution
- 3.2 Water Pollution
- 3.3 Household wastes
- 3.4 Housing
- 3.5 Workplace

**Unit IV: Climate Change, Health and Disease Patterns 15**

(In Environmental Context with special reference to India)

- 4.1 Communicable diseases and their regional pattern – AIDS and Covid 19
- 4.2 Lifestyle related diseases and their regional pattern – Cancer and Diabetes
- 4.3 Climate change and human health
- 4.4 Nutrition and human health

**References:**

- Akhtar Rais (Ed.), 1990: Environment and Health Themes in Medical Geography, Ashish Publishing House, New Delhi.
- Avon Joan L. and Jonathan A Patzed., 2001:Ecosystem Changes and Public Health, Baltimin, John Hopling Unit Press(ed).
- Bradley, D., 1977: Water, Wastes and Health in Hot Climates, John Wiley Chichesten.
- Brown T., S. Mc Lafferty, and G. Moon. 2009. A companion to health and medical geography. Chichester, UK: Wiley-Blackwell. DOI:
- Christaler George and HristopoulosDionissios, 1998:SpatioTemporalEnvironment Health Modelling, Boston Kluwer Academic Press.
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- Gatrell, A., and Loytonen, 1998: GISand Health, Taylor and Francis Ltd, London.
- Gatrell A., and S. Elliott. 2009. Geographies of health. Chichester, UK: Wiley- Blackwell.
- Gesler, W., and W. Kearns. 2002. Culture place and health. Critical Geographies. London: Routledge.
- HardhamT. andTannavM., (eds):Urban Health in Developing Countries; Progress, Projects, Earthgoan, London.
- Moeller Dadewed., 1993: Environmental Health, Cambridge, Harvard University Press.
- Shelar, S.K., 2012: Introduction to Medical Geography, Chandralok Pub., Kanpur.
- Tromp, S., 1980: Biometeorology: The Impact of Weather and Climate on Humans and their Environment, Heydon and Son.
- MOOCS - NPTEL: <https://nptel.ac.in/> MOOCS - SWAYAM: <https://swayam.gov.in/>
- National Digital Library of India: <https://ndl.iitkgp.ac.in/>

**PUNYASHLOK AHILYADEVJI HOLKAR SOLAPUR UNIVERSITY,  
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**Bachelor of Arts (B. A.)**

**B. A. Part - III Political Geography**

Syllabus to be implemented from June 2024 onwards

**1. Title : Political Geography**

**2. Year of Implementation :** Revised Syllabi will be implemented from June 2024 onwards.

**3. Preamble:** This paper is an academic discipline which is designed for student to convey knowledge about political activity of people and integral geographical space, which includes physical, economic, social, cultural, and political spaces. Also concerned with the study of both the spatially uneven outcomes of political processes and the ways in which political processes are themselves affected by spatial structures.

**4. Objectives:**

- To understand the basic concepts of political geography.
- To familiarize the students with the geographical factors which have bearing on the geopolitical/ administrative organization of space.
- To enhance awareness of multidimensional nature of geo-political space.

**5. Course Outcomes:**

After the completion of course, the students will have ability to:

- Student will understand the history and development of political geography.
- Get knowledge about evaluation of state and nation.
- Get knowledge of Geo-political theories.
- Investigates problems and disputes of India with the most current research topics in political geography.

**6. Pattern of Exam:** Semester

**7. Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers     | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|---------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                     | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Political Geography | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper  | Old paper No. | Title of New paper  | New Paper No. |
|---------|---------------------|---------------|---------------------|---------------|
| 1.      | Political Geography | IX            | Political Geography | DSE 3B OR XI  |

**NEW/REVISED SYLLABUS FOR  
B. A. Part-III Geography (Introduced from June 2024 onwards)  
Semester – VI**

**i. DSE 3B OR Paper No. XI**

**ii. Title of Paper: Political Geography**

**Unit I: Introduction of Political Geography** **15**

- 1.1 Definition of Political Geography
- 1.2 Nature and Scope of Political Geography
- 1.3 Historical Development of Political Geography
- 1.4 Significance of Political Geography

**Unit II: Concepts in Political Geography** **15**

- 2.1 Concept of State, Nation, State- Nation, Frontiers and Boundaries
- 2.2 Elements of State: Location, Shape, Size, Topography, Climate, Vegetation, Resources, Population and Communication.
- 2.3 Concept of Geopolitics

**Unit III: Theories in Political Geography** **15**

- 3.1 The Heartland Theory of H. J. Mackinder
- 3.2 Rim Land Theory of N. J. Spykman

**Unit IV: Resource Conflicts and Politics of Displacement** **15**

- 4.1 Krishna Water Conflict (Inter State)
- 4.2 Ganga Water Conflict (International)
- 4.3 Issues of Relief, Compensation and Rehabilitation: Sardar Sarovar Projects
- 4.4 Issues of Relief, Compensation and Rehabilitation: Ujani Projects

**References:**

- Agnew J., 2002: *Making Political Geography*, Arnold.
- Agnew J., Mitchell K. and Toal G., 2003: *A Companion to Political Geography*, Blackwell.
- Cox K. R., Low M. and Robinson J., 2008: *The Sage Handbook of Political Geography*, Sage Publications.



- Cox K., 2002: *Political Geography: Territory, State and Society*, Wiley-Blackwell
- Gallaher C., et al, 2009: *Key Concepts in Political Geography*, SagePublications.
- Glassner M., 1993: *Political Geography*, Wiley.
- Jones M., 2004: *An Introduction to Political Geography: Space, Place and Politics*, Routledg.
- Mathur H M and M MCernea (eds.) *Development, Displacement and Resettlement – Focus on Asian Experience*, Vikas, Delhi
- Painter J. and Jeffrey A., 2009: *Political Geography*, SagePublications.
- Taylor P. and Flint C., 2000: *Political Geography*, PearsonEducation.
- Verma M K (2004): *Development, Displacement and Resettlement*, Rawat Publications, Delhi
- Hodder Dick, Sarah J Llyod and Keith S McLachlan (1998), *Land Locked States of Africa and Asia* (vo.2), FrankCass

**PUNYASHLOK AHILYADEVJI HOLKAR SOLAPUR UNIVERSITY,  
SOLAPUR**

**Bachelor of Arts (B. A.)**

**B. A. Part - III Hydrology and Oceanography**

Syllabus to be implemented from June 2024 onwards

- Title :** Hydrology and Oceanography
- Year of Implementation:** Revised Syllabi will be implemented from June 2024 onwards.
- Preamble:** This paper is basically designed to cater to foundation building of the students by imparting knowledge about the hydrological cycle. It encompasses the availability of water on the globe and its uses on the earth surface.
- Objectives:**
  - To study the basic knowledge of hydrological cycle on the globe.
  - To study the importance of oceans and seas related to precipitation on the earth surface and its impact on agriculture.
  - To understand the riverine basin and its impact on human settlement
  - To study the marine importance and its necessity to over population in future
- Course Outcomes:**

After the completion of course, the students will have ability to:

  - Students were able to visualize the basic theme, ideas and approaches of geographic knowledge about hydrological cycle related to formation of precipitation, infiltration, ground water recharge.
  - Understanding of human interference on hydrological cycle and its impact on globally drought region, flooded area.
- Pattern of Exam:** Semester
- Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers            | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|----------------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                            | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Hydrology and Oceanography | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper | Old paper No. | Title of New paper         | New Paper No. |
|---------|--------------------|---------------|----------------------------|---------------|
| 1.      | Applied Geography  | XII           | Hydrology and Oceanography | DSE 4A OR XII |

**NEW/REVISED SYLLABUS FOR  
B. A. Part-III Geography (Introduced from June 2024onwards)  
Semester – VI**

- i. DSE 4A OR Paper No. XII**  
**ii. Title of Paper: Hydrology and Oceanography**

**Unit I: Hydrological Cycle** **15**  
Systems approach in hydrology, Hydrological Cycle, human impact on the hydrological cycle; Precipitation, interception, evaporation, evapo-transpiration, infiltration, ground- water, run off and over land flow; Hydrological input and output. Water budget on globe.

**Unit II. River Basin and Problems of Regional Hydrology** **15**  
Characteristics of river drainage basins, basin surface run-off, measurement of river discharge; floods and droughts.

**Unit III. Ocean Floor Topography ,Ocean Properties and Circulations** **15**  
Ocean Floor Topography, Ocean Waves, Currents and Tides. Ocean Salinity and Temperature – Distribution and Determinants.

**Unit IV. Coral Reefs and Marine Deposits** **15**  
Types and Theories of Origin of Coral formation; Biotic and Mineral wealth in seas and oceans

**References:**

- Andrew. D. ward and Stanley, Trimble (2004): Environmental Hydrology, 2nd edition, Lewis Publishers, CRC Press.
- Karanth, K.R., 1988 : Ground Water: Exploration, Assessment and Development, Tata-McGraw Hill, New Delhi.
- Ramaswamy, C. (1985): Review of floods in India during the past 75 years: A Perspective. Indian National Science Academy, New Delhi.
- Rao, K.L., 1982 : India's Water Wealth 2nd edition, Orient Longman, Delhi,.
- Singh, Vijay P. (1995): Environmental Hydrology. Kluwar Academic Publications, The Netherlands.
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to Oceanography, Prentice-Hall.

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- Pinet P. R., 2008: Invitation to Oceanography (Fifth Edition), Jones and Barlett Publishers, USA, UK and Canada.
- Sharma R. C. and Vatal M., 1980: Oceanography for Geographers, Chaitanya Publishing House, Allahabad.
- Sverdrup K. A. and Armbrust, E. V., 2008: An Introduction to the World Ocean, McGraw Hill, Boston.
- Singh, M., Singh, R.B. and Hassan, M.I. (Eds.) (2014) Landscape ecology and water management. Proceedings of IGU Rohtak Conference, Volume 2. Advances in Geographical and Environmental Studies, Springer
- Raghunath, H.M. (2006): Hydrology: Principles, analysis and Design (2nd Ed.), New age International, New Delhi.
- Cech, T.V. (2009): Principles of Water Resources: History, Development, Management, and Policy (3rd Ed.), Wiley, Hoboken, New Jersey.
- Trujillo, A.P., and Thurman, H.V. (2010): Essentials to Oceanography (10th Ed.), Prentice Hall, New Jersey.

**PUNYASHLOK AHILYADEVJI HOLKAR SOLAPUR UNIVERSITY,  
SOLAPUR**

**Bachelor of Arts (B. A.)**

**B. A. Part - III Social Geography**

Syllabus to be implemented from June 2024 onwards

1. **Title :** Social Geography

2. **Year of Implementation:** Revised Syllabi will be implemented from June 2024 onwards.

3. **Preamble:** This curriculum focuses on the understanding of social geography of the discipline. This paper is specially designed to cater to social study of the students by imparting knowledge about the society. Social geography is the branch of human geography that is most closely related to social problems and well being, dealing with the relation of social phenomena and its spatial components. The different conceptions of social geography have been overlapping with other sub-fields of geography.

4. **Objectives:**

- Understanding the concept, nature and scope of social geography.
- To study the technological, occupational and migration changes of peoples in India.
- An analysis of different social categories and their spatial distribution.
- To understand the geographies of social welfare, well being and social problem.

5. **Course Outcomes:**

After the completion of course, the students will have ability to:

- In depth understanding the problems and prospects of society in India.
- The students are fully aware about the technological, occupational and migration changes of peoples in India.
- Detailed knowledge about the social categories and their spatial distribution.
- Understanding concepts of social wellbeing, welfare and social problem in India.

6. **Pattern of Exam:** Semester

7. **Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers  | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |       |
|---------|------------------|---------------------------|----|----|-------|----------------------------|-----------|-------|
|         |                  | L                         | T  | P  | Total | Theory                     | Term work | Total |
| 1       | Social Geography | 04                        | 04 | -- | 04    | 40                         | 10        | 50    |

**8. Equivalence in accordance with titles and contents of papers (For revised papers)**

| Sr. No. | Title of Old Paper      | Old paper No.        | Title of New paper      | New Paper No.        |
|---------|-------------------------|----------------------|-------------------------|----------------------|
| 1       | <b>Social Geography</b> | <b>DSE 4B OR XII</b> | <b>Social Geography</b> | <b>DSE 4B OR XII</b> |

**NEW/REVISED SYLLABUS FOR  
B. A. Part-III Geography (Introduced from June 2024 onwards)  
Semester – VI**

**i. DSE 3A OR Paper No. XII**

**ii. Title of Paper: Social Geography**

**Unit I: Introduction of Social Geography** **15**

1.1 Definition of Social Geography

1.2 Nature and Scope of Social Geography

1.3 Branches of Social Geography

1.4 Approaches and Importance of Social Geography

**Unit II: Peopling Process of India** **15**

2.1 Concept of peopling process

2.2 Technological Changes

2.3 Occupational Changes

2.4 Migration

**Unit III: Social Categories and their spatial distribution of World** **15**

3.1 Tribe- ( Bushman and Gond)

3.2 Race-

3.3 Religion

**Unit IV: Social Welfare, Wellbeing and Social Problems in India** **15**

4.1 Concept of Social Welfare and Wellbeing

4.2 Components of Social Welfare and Wellbeing – Healthcare, Housing and Education

4.3 Social Problems- Slums, Communal Conflicts and Crime

**References:**

- Ahmed A., 1999: Social Geography, Rawat Publications.
- Casino V. J. D., Jr., 2009) Social Geography: A Critical Introduction, Wiley Blackwell.
- Cater J. and Jones T., 2000: Social Geography: An Introduction to Contemporary

Issues, Hodder Arnold.

- Holt L., 2011: Geographies of Children, Youth and Families: An International Perspective, Taylor & Francis.
- Panelli R., 2004: Social Geographies: From Difference to Action, Sage.
- Rachel P., Burke M., Fuller D., Gough J., Macfarlane R. and Mowl G., 2001: Introducing Social Geographies, Oxford University Press.
- Smith D. M., 1977: Human geography: A Welfare Approach, Edward Arnold, London.
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- Smith S. J., Pain R., Marston S. A., Jones J. P., 2009: The SAGE Handbook of Social Geographies, Sage Publications.
- Sopher, David (1980): An Exploration of India, Cornell University Press, Ithasa
- Valentine G., 2001: Social Geographies: Space and Society, Prentice Hall.
- सामाजिक व सांस्कृतिक भूगोल : विठ्ठल चारपुरे, पिंपळापुरे प्रकाशन, नागपूर

**PUNYASHLOK AHILYADEVJI HOLKAR SOLAPUR  
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**B. A. Part – III Geography (Practical Paper -I)**

- 1.Title** : Map Work & Map Interpretation
- 2.Year of Implementation** : Revised Syllabi will be implemented from June 2021 onwards.
- 3.Preamble** : Practical Work is the most important part of Geography. Map is an indispensable tool in Geographical Studies & Research activities. The present syllabus of this paper includes study of maps and their types, Map Projections, S.O.I. Topomaps, I.M.D. Weather Maps, and Cartographic Techniques.
- 4.Objectives** :
- To introduce the students with the importance of map making and map Interpretation.
  - To make the students to understand map, concept of scale and concept of projection.
  - To provide training in analysis of landforms.
  - To give basic information to the students about S.O.I. maps and I.M.D. weather Reports.
  - To develop the skill of map Interpretation among the students.
- 5.Course Outcomes** :
- In depth understanding the map, concept of scale and projection.
  - Detailed knowledge about the analysis of landforms and its identification.
  - The students are deeply aware about basic information to the students about S.O.I. toposheets and I.M.D. weather reports
  - and obtained the skills about map interpretation.
- 6.Pattern of Exam** : Annual

**7.Scheme of Teaching & Examination**

| Sr. No. | Subjects/Papers                   | Teaching Scheme Hrs./Week |    |    |       | Examination scheme (Marks) |           |                |
|---------|-----------------------------------|---------------------------|----|----|-------|----------------------------|-----------|----------------|
|         |                                   | L                         | T  | P  | Total | Practical                  | Term work | Total (Annual) |
| 1       | Map Making and Map Interpretation | --                        | -- | 10 | 10    | 100                        | --        | 100            |



Revised Syllabus for B. A. – III (Introduced from June 2024 Onwards)

Revised Syllabus for B. A. (Part III) Geography

Practical Paper -I

**Title of Paper - Map Making and Map Interpretation (100 Marks)**

**Unit – 1: Introduction to Map and Map Scales**

**Periods 50 Marks (15)  
Map**

- Map – Definition, Elements
- Classification of Maps: Based on Scale and Purpose

**Map Scale**

- Meaning and Definition of Map Scale
- Methods of Representation of scale - Verbal, Numerical and Graphical.
- Scale Conversion
- Construction of Graphical Scale –i) Simple (Plane Scale) ii) Time and Distance Scale  
iii) Diagonal Scale

**Unit – 2. Map Projection**

**Periods 50 Marks (15)**

**Definition, Classification of Projections:**

- Based on Method of Construction: perspective and non-perspective
- Based on Developable Surface used: Conical, Cylindrical, Zenithal, Conventional.
- Based on Position of Tangent Surfaces: Polar, Equatorial (normal), Oblique.
- Based on Position of view point or light: Gnomonic, Stereographic, Orthographic

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

- Zenithal Polar Gnomonic Projection
- Zenithal Polar Equal Area Projection
- Simple Conical Projection with one standard Parallel
- Simple Conical Projection with two standard Parallel
- Cylindrical equal area projection
- Mercator's Projection and Reference to Universal Transverse Mercator (UTM) Projection

**Unit – 3: Relief Profile Analysis**

**Period 50**

**Marks (15)**

- **Slope and Gradient**

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

Methods of Relief Representation

- **Qualitative:** - Hachures, Hill shading, Layer Tint
- **Quantitative:** - Contours, Form lines, Spot Heights, Bench Marks, Triangulation Mark  
Expression of Slopes: a) Gradient b) Degree c) Per Cent d) Mills
- **Representation of Relief by Contours:** Hill, Mountain, Ridge, Cliff, Saddle, Plateau, Col or Pass, Gorge, 'V' Shaped Valley, Waterfall, 'U' Shaped Valley, Cirque, Sea cliff.
- **Profiles-** Simple profile, longitudinal profile

#### **Unit – 4 : Topographical Maps**

**Periods 50    Marks (15)**

- **Development of Survey of India**
- **Indexing of S.O.I. Topographical Maps**
- **Signs, Symbols and Colors used in SOI Toposheet**
- **Interpretation of S.O.I.'s Topographical Map** (Mountain, Plateau and Plain) a)  
Marginal Information b) Physical environment: Relief, Drainage and Vegetation c)  
Cultural environment: Settlements, Transportation and Communication, Irrigation. d)  
Land Use

#### **Unit 5: Weather Instruments and IMD Maps Periods 50 Marks (15)**

- **Study of weather Instruments** with reference to Principle, Mechanism, and Function  
a) Thermograph b) Barograph c) Dry and Wet Bulb Thermometer d) Wind vane e) Cup  
Anemometer f) Rain Gauge.
- **Sign and Symbols used in Indian Daily Weather Maps.**
- **Isobaric Patterns:** Cyclone, Anticyclone, Col, Wedge, Trough and Secondary  
Depression.
- **Interpretation of Indian Daily Weather Maps** (Rainy, Winter and Summer) Marginal  
Information, Atmospheric Pressure, Winds, Clouds, Rainfall, other weather  
phenomena's, Sea Condition, Temperature departure from normal.

#### **Unit 6 : Representation of Statistical Data    Periods 50    Marks 15**

- **Graphs and Diagrams**  
Diagrammatic Data Presentation: i) Climograph, ii) Hythergraph iii) Ergograph (Crop  
Calendar)
- **Thematic Mapping Techniques:** i) Proportional Circle ii) Choropleth Map iii) Dot  
Map iv) Isopleths v) Star Diagram

**7 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.
3. Examiners should set jointly the question paper for each batch.
4. Each batch should not more than 12 students

**Reference:**

- Bygoot, J: An Introduction to Mapwork and Practical Geography, University Tutorial, London 1964.
- Khan MD. Zulfequar Ahmad : Text Book of Practical Geography, Concept Publishing Company, New Delhi, 1998
- Mishra, R.P. and Ramesh A. : Fundamentals of Cartography, Concept Publishing Company, New Delhi, 2000
- Monkhouse F.J. and Wilkison, H.R.: Maps and Diagrams, Mathuen. London, 1971.
- Negi., Dr. Balbir Singh : Practical Geography, KedarNath Ram Nath, Meerut, Delhi.
- Raisz, E.: Principals of Cartography, McGraw Hill Book Com., Inc, New York, 1962.
- Robinson, A.H. and Sale, S.D.: Elements of Cartography, John Witey and Sons, Inc, New York, 1969.
- Saha, Pijushkanti and BasuPartha : Advanced Practical Geography – A Laboratory
- Manual Books and Allied (P) Ltd, Kolkata. 2010.
- Sarkar, Ashis : Practical Geography: A systematic Approach, Orient Longman limited, Calcutta, 1997.
- Singh, Gopal : Map work and Practical Geography Vikas Publishing House Pvt. Ltd. New Delhi, 1996.
- Singh, R and Kanaujia, L.R.S.: Map Work and Practical Geography, Central Book Depot, Allahabad.
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- Khullar, Essentials of Practical Geography, New Academic Publishing Co, India.
- Singh L R (2011): Fundamentals of Practical Geography
- Robinson Rep. (2010): Elements of Cartography

**PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR  
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**B. A. Part – III Geography (Practical Paper -II)**

|    |                                             |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----|---------------------------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Title</b>                                | : | <b>Advanced Tools, Techniques &amp; Field Work</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2. | <b>Year of Implementation</b>               | : | Revised Syllabi will be implemented from June 2021 onwards.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 3. | <b>Preamble</b>                             | : | Modern science & technology have gained momentum. In the process of development of science and technology, the changing nature of subject of Geography will make aware to the students about the advanced techniques such as Remote Sensing, GIS and GPS. The application of computers has revolutionized the use of methods & techniques. The present syllabus of this paper includes study of Aerial Photographs, Remote Sensing, GIS, Application of Computer and use of field work in Geography. This will further help to improve the use of advanced techniques and methods in teaching-learning and research work. |
| 4. | <b>Objectives</b>                           | : | <ol style="list-style-type: none"> <li>1) To introduce the students with the importance of field work and advanced Techniques in Geography.</li> <li>2) To provide training in application of modern tool and techniques in Geography.</li> <li>3) To enable the students to understand the use of computer for analysis of Geographical data.</li> <li>4) To enhance the skill of the students in instrumental survey.</li> <li>5) To give basic information to the students about Arial Photographs, Remote Sensing, GIS and GPS.</li> </ol>                                                                            |
| 5. | <b>Course Outcomes</b>                      | : | <ol style="list-style-type: none"> <li>1. In depth understanding the importance of field work and advanced Techniques in Geography.</li> <li>2. The students are trained to implement modern tool and techniques in Geography.</li> <li>3. The students are deeply aware about the basics and trained in instrumental survey.</li> <li>4. The students are deeply familiar with computer, GIS, GPS and Remote Sensing.</li> </ol>                                                                                                                                                                                         |
| 6. | <b>Pattern of Exam</b>                      | : | Annual                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 7. | <b>Scheme of Teaching &amp; Examination</b> |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Sr. No. | Subjects/Papers                         | Teaching Scheme<br>Hrs./Week |    |    |       | Examination scheme (Marks) |           |                |
|---------|-----------------------------------------|------------------------------|----|----|-------|----------------------------|-----------|----------------|
|         |                                         | L                            | T  | P  | Total | Practical                  | Term work | Total (Annual) |
| 1       | Advanced Tools, Techniques & Field Work | --                           | -- | 10 | 10    | 100                        | --        | 100            |

**Revised Syllabus for B. A. – III (Introduced from June 2024 Onwards)**  
**Revised Syllabus for**  
**B. A. (Part III) Geography Practical Paper -II**

**Title of Paper - Advanced Tools, Techniques In Geography (Computer, Remote Sensing, GIS, GPS) & Field Work (100 Marks)**

**Unit: 1 Introduction to Computer                      Lectures-50                      Marks-10**

1.1: **Computer Fundamentals:** Definition, Characteristics, Hardware & Software. 1.2:

**Application of computer in geography**

: Construction of Line Graphs, Bar Graphs

: Construction of Pie Diagram and Scatter Diagram.

1.3: **Significance and application of Internet in Geographical Studies.**

**Unit: 2 Remote Sensing                      Lectures- 50                      Marks-15**

Definition, Components and Development of Remote Sensing.

Principles of Remote Sensing: EMR, Sensors and Platforms.

Application of Remote Sensing in Geography.

Aerial photographs and Satellite imagery: Definition, types

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

**Unit: 3 GIS and GNSS (GPS)                      Lectures- 50                      Marks 15**

**Geographical Information System (GIS)**

Definition and components

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

Georeferencing, Digitization, Map Layout Preparation

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

Monitoring

### **Global Navigation Satellite System (Global Positioning System)**

Definition and components

Application of GPS in Geography

Field work through GPS: Determining latitude, longitude and altitude

Exercise with Google earth Program.

## **Unit :4 Statistical methods and techniques    Lectures- 60    Marks-15**

: Geographical Data / information:

Spatial and Temporal

Individual, Discrete and Continuous Data

Analysis of data by the following statistical techniques

Measures of Central Tendency: Mean, Median and Mode

Dispersion: Mean deviation, Standard deviation and Quartile Deviation.

Correlation: Karl Pearson's Method

Analysis of Time Series: Semi-average Method and Moving average method

## **Unit :5 Surveying                      Lectures- 60                      Marks-15**

Survey: Meaning and types

Preparation of plans of the given area with the following survey method (**Any one method among them**)

- Dumpy Level survey
- Plane Table survey (Radial, Intersection, and open and closed Traverse method)
- Abony Level Survey.
- Preparation of plans by Prismatic compass survey (Radical, Intersection and open and closed Traverse method)

5.3.1 Correction of bearing.

Preparation of plans by Chain and Tape survey (Triangulation and open and closed

Traverse method)

5.4.1. Cross staff surveying

### **Unit:6 Project work based on field work (any one from below ) Marks-10**

Research Methodology

Resource, Population, Agricultural, Settlement, Environmental, Industrial, Health issues, any other issues related to local area.

(Project Report must be content of following points: Introduction – Aims – Objectives - Review of the literature - Data collection – Methodology - Data Analysis – Interpretation - Findings – Suggestions – Bibliography)

### **Unit:7 Study TourMarks-10**

Maximum 15 days at Geographical Interest in India and preparation of Excursion report.

### **Unit:8 Journal and Viva VoceMarks 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.
3. Examiners should set jointly the question paper for each batch.
4. Each batch should not more than 12 students
5. Each department should have at least 2 computers, 1 printer, 1 scanner, 10 pairs of Aerial Photographs, 5 Pocket Stereoscopes, 2 Mirror Stereoscopes and 5 Remote Sensing Images.

### **Reference:**

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- Monkhouse F.J. and Wilkison, H.R.: Maps and Diagrams, Mathuen. London, 1971.
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- Khullar, Essentials of Practical Geography, New Academic Publishing Co, India.
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- Robinson Rep. (2010): Elements of Cartography



**SOLAPUR**  
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## B. A. Part - III

### SEC 01 A CERTIFICATE COURSE IN LAND SURVEY

**Objectives** –The course aims to achieve the following objectives:

- To introduce the students a new technology of Land Surveying.
- To acquaint the students with reading obtained with Total Station/GPS forming a database for surveying and mapping.
- To offer practical training in land surveying to the students and make them surveying experts.
- To generate job opportunities in the corporate and government sector.

#### Paper I Theory

| Unit No. | Topic                                    | Subtopic                                                                                                                                     | No. of Periods |
|----------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1.       | <b>Introduction to Surveying</b>         | Meaning and definition of surveying, History of survey, Types of surveying, Concept of Surveying, Uses of surveying                          | 0              |
| 2.       | <b>Scale and Contours</b>                | Definition and meaning, Characteristics and properties, Methods of contour, Definition and Methods of expression of Scale, Measurement units | 0              |
| 3.       | <b>Introduction to S.O.I. Toposheets</b> | Indexing, Conventional Signs, Symbols Interpretation of SOI topographical map                                                                | 0              |
| 4.       | <b>Surveying</b>                         | Introduction to chain and tape, plane table and prismatic compass survey<br>Survey instruments and its use, merits and demerits              | 0              |
| 5.       | <b>Dumpy level Survey</b>                | Definition and Principles, Instruments and its use, Merits and demerits                                                                      | 0              |
| 6.       | <b>Theodolite Survey</b>                 | Definition and Principles, Horizontal & Vertical angles, Instrument and its use, Merits and demerits                                         | 0              |
| 7.       | <b>Computer Cartography</b>              | Principles of Computer Cartography, Hardware and Software, Application of Computer Cartography, Advantages and Limitation                    | 1              |

|    |                                |                                                                                                                                                                                                         |   |
|----|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 8. | <b>Total Station Surveying</b> | Basic Terms used in Total Station Surveying, Total Station instrument components, Phases of Total Stations Survey, Sources of error for total stations, Electronic Notebook, Advantage and disadvantage | 1 |
|----|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|

## REFERENCES

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- Mishra, R.P. (1973): Elements of Cartography. Prasaranga, University of Mysore.
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- Nel, S . (2008):Global Positioning, John Wiley and Sons, Hoboken

## Paper II

### Paper – II (Practical) Field Work and Laboratory Work

| Unit No    | Topic                                       | Subtopic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No. of Period |
|------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
|            | <b>i. Scale and Area Measurement</b>        | 1. Conversion of units<br>2. Conversion and Construction of scale<br>3. Exercises on area measurement.<br>4. Interpolation of contour lines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>15</b>     |
|            | <b>ii. Modern Land Surveying Techniques</b> | <ul style="list-style-type: none"> <li><b>Total Station-</b><br/>Vertical and horizontal angle measurement, topographical survey (plain table and contour survey), Stake out / Demarcation/ Survey of Building Layouts / Plot Layouts / Roads / Alignments, Establish Benchmarks, Measurement of remote distance and elevation using special function of TS, Solution of trigonometric problems using COGO function on the field / Site, Calculate 2D, 3D area on the field / Site, Calculation of surface volume on the field / Site, Survey work estimation factors, procedure for download and upload data to TS, TS data formats, Preparation simple survey map using Software.</li> </ul> | <b>25</b>     |
|            | <b>iii. Field trip</b>                      | Organization of field trip for Total Station                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>05</b>     |
| <b>iv.</b> | <b>Project work</b>                         | (Application of Total Station in specific domain area)<br>Total Station data acquisition, Processing and Presentation Project Report : Final Reporting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>20</b>     |
| <b>v.</b>  | <b>Viva – voce</b>                          | Based on Project Work                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>05</b>     |

## REFERENCE

- Satheesh Gopi, (2007), Advanced Surveying: Total Station, GIS and Remote Sensing Pearson Education India,
- Charles D. Ghilani, Paul Richard Wolf (2008): Elementary Surveying: An Introduction to Geomatics, Prentice Hall,
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- Parkinson, B. Spilker J. : (Eds.) (1996) GPS : Theory and Applications Vol. I & II, AIAA, Washington.

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**B. A. Part - III**

**SEC 02**

# **A CERTIFICATE COURSE TRAVEL AND TOURISM**

**Objectives:**

- i. To introduce the fundamental concept of Travel and Tourism.
- ii. To familiarize with the significance and emerging trends in tourism.

| <b>Unit No</b> | <b>Topic</b>                       | <b>Subtopic</b>                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>No. of Periods</b> |
|----------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>1</b>       | Introduction to Tourism            | Meaning & definitions of tourism, traveler, excursionist, tourists - Objectives, nature & Classification of tourism & tourists. Tourism recreation & leisure inter-relationship. Growth and development of Tourism through the ages.                                                                                                                                                                                                     | <b>10</b>             |
| <b>2</b>       | Economics of Tourism Industries    | Emergence of Thomas Cook – Emergence of Travel Intermediaries- Definition - The travel Market: Business Travel - Corporate Travel - Commercial Group Travel - Institutional Travel - Leisure Travel - Family Travel - Single Resort Travel - Special Interest Travel. Types of travel agency and tour operations - Inter-relationship between Travel agency and tour operation. Indian travel agencies and tour operators - an overview. | <b>10</b>             |
| <b>3</b>       | Components and Forms of Tourism    | Components of tourism<br>Forms of Tourism: religious, Medical Tourism, historical, social, adventure, health, business, conferences, conventions, incentives, sports Agro and adventure tourism                                                                                                                                                                                                                                          | <b>10</b>             |
| <b>4</b>       | Major tourist attractions in India | physical and political attractions of Indian subcontinents. Tourism attractions in different states and territories of India.                                                                                                                                                                                                                                                                                                            | <b>10</b>             |
| <b>5</b>       | Tourism Marketing                  | Marketing for Hospitality and Tourism – Definition – Core Marketing Concepts – Marketing Philosophies – Selling Vs Marketing, Differences between Products and Services – Technology and Marketing – Specific features of Tourism Marketing.                                                                                                                                                                                             | <b>10</b>             |

|  |  |                                                                                                       |           |
|--|--|-------------------------------------------------------------------------------------------------------|-----------|
|  |  | <b>FIELD WORK CASE STUDIES</b><br>Planning and Organization of tour on famous routs for 2 to 15 days. | <b>40</b> |
|--|--|-------------------------------------------------------------------------------------------------------|-----------|



**References:**

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9. Ghosh Bishwanth (2000), Tourism & Travel Management, Second Revised Edition Vikas Publishing House Pvt Ltd, New Delhi.
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**B. A. Part - III**

**SEC 03  
A CERTIFICATE COURSE IN QGIS**

**Objectives:**

- Learn the concepts of open-source software
- Understand the interface of QGIS and its plug-ins
- Learn how to fetch data into QGIS and work with table attributes
- Create maps using QGIS followed by its printing process

**Unit I :Introduction of QGIS** **15**

Objectives, working with projection, installation of software and plugins

**Unit II :Georeferencing and Digitization** **20**

Toposheet Registration.

Digitization of Toposheet - point, Line and polygon

**Unit III :Types of data and Analysis** **15**

Vector data, raster data Dissolving and Merging

Clipping and Union Buffering techniques

**Unit IV: Layoutand map composition** **20**

Map Preparation and composition, Symbology in of QGIS.

Working with Tables(Join Tables)

**Unit V:Application in Urban Planning:** **20**

Mapping urban landuse, transportation network, Utility-Facility mapping

**References:**

- A comprehensive introduction to Quantum GIS – RudigerThiede and others
- Introduction to QGIS – Scott Madry
- Learn QGIS – Andrew Cutts, Anita Graser

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[www.qgis.org](http://www.qgis.org)