AC No.:

**Rayat Shikshan Sanstha's**

# KARMAVEER BHAURAO PATIL COLLEGE, VASHI,

## AUTONOMOUS COLLEGE

Sector-15- A, Vashi, Navi Mumbai -400 703

**NAAC Grade "A+" with CGPA 3.53**

Revised Syllabus

Program: T.Y.B.A.

Course: Geography

Semester: V and VI

(As per Choice Based Credit System with effect from the academic year 2023-24)

# Karmaveer Bhaurao Patil College Vashi, Navi Mumbai

**Autonomous College**

[University of Mumbai]

Syllabus for Approval

| Sr. No. | Heading | Particulars |
|---|---|---|
| 1 | **Title of Course** | **TYBA Geography SEM. V and VI** |
| 2 | **Eligibility for Admission** | |
| 3 | **Passing Marks** | **40%** |
| 4 | **Ordinances/Regulations (if any)** | |
| 5 | **No. of Years/Semesters** | **One year** |
| 6 | **Level** | **U.G.** |
| 7 | **Pattern** | **Semester** |
| 8 | **Status** | **CBCS** |
| 9 | **To be implemented from Academic year** | **2023-24** |

Rayat Shikshan Sanstha's

# Karmaveer Bhaurao Patil College, Vashi

(Autonomous College)

## Department of Geography

## Program: TYBA

## Details of Semester wise Course and Credits

| Course No. | Course Title | Course Type | Course Code | CIE Marks | SEE Marks | Total | Credit Points |
|---|---|---|---|---|---|---|---|
| **Semester V** | | | | | | | |
| 1.1 | Geospatial Technology | SEC | UGGEO501 | 40 | 60 | 100 | 4 |
| 1.2 | Geography of Maharashtra | DSE | UGGEO502 | 40 | 60 | 100 | 4 |
| 1.3 | Tools and Techniques in Geography for Spatial Analysis-I | DSE | UGGEO503 | 40 | 60 | 100 | 4 |
| 1.4 | Regional Planning and Development | DSE | UGGEO504 | 40 | 60 | 100 | 4 |
| 1.5 | Geography of Settlements | DSE | UGGEO505A | 40 | 60 | 100 | 4 |
| | OR | | | | | | |
| | Political Geography | DSE | UGGEO505B | 40 | 60 | 100 | 4 |
| 1.6 | Geography of Health | GE | UGGEO506 | 40 | 60 | 100 | 3 |
| **Total** | | | | | | **600** | **23** |
| **Semester VI** | | | | | | | |
| 2.1 | Research Methodology | SEC | UGGEO601 | 40 | 60 | 100 | 4 |
| 2.2 | Economic Geography | DSE | UGGEO602 | 40 | 60 | 100 | 4 |
| 2.3 | Tools and Techniques in Geography for Spatial Analysis-II | DSE | UGGEO603 | 40 | 60 | 100 | 4 |
| 2.4 | Geography of Tourism and Recreation | DSE | UGGEO604 | 40 | 60 | 100 | 4 |
| 2.5 | Biogeography | DSE | UGGEO605A | 40 | 60 | 100 | 4 |
| | OR | | | | | | |
| | Geography of Resources | DSE | UGGEO605B | 40 | 60 | 100 | 4 |
| 2.6 | Environmental Geography | GE | UGGEO606 | 40 | 60 | 100 | 3 |
| **Total** | | | | | | **600** | **23** |

# Draft Syllabus under Autonomy

For T.Y.B.A. Programme at Semester V
with effect from the Academic Year 2022-23

# Geospatial Technology (Practical)
# (Skill Enhancement Course)

**Course Outcome:**

Students will acquire the basics of GIS and will use GIS to:

1. Comprehend knowledge about the concepts in GIS, GPS and Remote Sensing.
2. Relate GIS with remote sensing technologies.
3. Devise GPS ground survey and map.
4. Analyze spatial data, using GIS analysis tools.
5. Apply SAGA GIS and QGIS software.
6. Create maps, images and apps to communicate spatial data in a meaningful way to others.

## Modules at a Glance
### Geospatial Technology (UGGEO501)

| Unit No. | Unit | Unit Wise Weightage of Marks (in %) |
|---|---|---|
| 1 | Remote Sensing – I | 12 |
| 2 | Remote Sensing – II | 12 |
| 3 | Global Positioning System | 12 |
| 4 | Geographic Information System – I | 12 |
| 5 | Geographic Information System – II | 12 |

# T.Y.B.A. GEOGRAPHY
## (Skill Enhancement Course)
# GEOSPATIAL TECHNOLOGY (Practical)
## SEMESTER- V; COURSE CODE: UGGEO 501; COURSE CREDIT: 4

| | | No of Lectures |
|---|---|---|
| | **UNIT – I Remote Sensing – I** | |
| 1.1 | Geospatial Technology: Concept, Components and Importance | 09 |
| 1.2 | Remote Sensing: Concept, Process and Geographical Applications | |
| 1.3 | Electromagnetic Energy, EMR and EMS - Spectral Reflectance and Spectral Signature or Curve - Platforms, Sensors and Resolution | |
| 1.4 | Elements of Visual Image Interpretation - Mapping of Thematic Layers and Visual Image Interpretation of Physical and Manmade Features | |
| | **UNIT – II Remote Sensing – II** | 09 |
| 2.1 | Digital image analysis: land use and landform classification, 3D view of DEM | |
| 2.2 | Aerial Photographs: Concept, Process and Types | |
| 2.3 | Interpretation of Aerial Photographs | |
| 2.4 | Advanced Remote Sensing Technology - Use of Bhuvan website | |
| | **UNIT – III Global Positioning System** | 09 |
| 3.1 | GPS : Concept, Segments, Applications | |
| 3.2 | Types of GPS – GPS Data Accuracy and Errors | |
| 3.3 | Factors Affecting GPS Data - Global Navigation System | |
| 3.4 | Ground Survey and Demarcation of Point, Line and Polygon Features with GPS Device – Transfer GPS Data to Computer with Software's like Easy GPS | |
| | **UNIT – IV Geographic Information System – I** | 09 |
| 4.1 | GIS : Concept, Components and Applications - Map Projection and Coordinate System | |
| 4.2 | GIS Data Acquisition and Types | |
| 4.3 | Importing Image into GIS Software and Geo-referencing | |
| 4.4 | Creating Layers by Digitization of Point, Line and Polygon Features | |
| | **UNIT V Geographic Information System – II** | 09 |
| 5.1 | Functions of Database Creation – Input, Editing and Linking | |
| 5.2 | Spatial Database Analysis: Overlay, Merge, Query | |
| 5.3 | Using Map-Composer for Map Layout and Design | |
| 5.4 | Preparation of Thematic Maps | |

**REFERENCES:**


1. Anson, R. W. and Ormeling, F. J., (Ed.) (1993): Basic Cartography for Students and echnicians, Vol.I, International Cartographic Association and Elseiver Applied Science Publishers, London.
2. American Society of Photogrammetry (1983): Manual of Remote Sensing, ASP PalisChurch,V.A.
3. Agrawal, N.K.(2006), Essentials of GPS (Second Edition), Book Selection Centre, Hyderabad
4. Bhatia (2016): Remote Sensing and GIS, Oxford University Press, New Delhi.

5. Bhatia, S. C. (2008): Fundamentals of Remote Sensing, Atlantic Publishers and Distributors (P) Limited, New Delhi.
6. Bhatta Basudeb 2016: Remote Sensing and GIS, Oxford University Press, New Delhi
7. Barrett, E.G. and Curtis, L.F. (1992): Fundamentals of Remote Sensing in Air Photo-interpretation, McMillan, New York. 7.
8. Bernhardsen, Tor (2002): Geographical Information Systems: An Introduction, Third Edition, John Wiiey& Sons, Inc., New York.
9. Burrough, Peter A and McDonnell, R.A. (1998): Principles of Geographical Information Systems, Oxford University Press, Mumbai.
10. Campbell. J. (1989): Introduction to Remote Sensing, Guilford, New York.
11. Clarke, Keith C. (1998): Getting Started with Geographic Information Systems, Prentice-Hall Series in Geogl. Info. Science, Prentice-Hall, Inc. N.J.
12. Central Board of Secondary Education (New Delhi): Geospatial Technology – Textbook, Class XI and XII

# GEOGRAPHY OF MAHARASHTRA

## Discipline Specific Elective (DSE)

**Course Outcome:**

- Understand the Geographical Setting of Maharashtra
- Understand the natural resources and human resources
- Study of agricultural regions, recent issues and policies
- Get knowledge of major industrial regions

## Modules at a Glance

### Geography of Maharashtra (UGGEO502)

| Unit No. | Unit | Unit Wise Weightage of Marks (in %) |
|---|---|---|
| 1 | Maharashtra: Geographical Setting | 15 |
| 2 | Natural Resources | 15 |
| 3 | Human Resources | 15 |
| 4 | Agriculture, Fishing and Livestock Resources | 15 |

# T.Y.B.A. GEOGRAPHY
## Discipline Specific Elective
# GEOGRAPHY OF MAHARASHTRA
## SEMESTER- V; COURSE CODE: UGGEO502; COURSE CREDIT: 04

| | | No of Lectures |
|---|---|---|
| **Unit-I : Maharashtra: Geographical Setting** | | |
| 1.1 | Location, extent and boundaries | **15** |
| 1.2 | Administrative setup and divisions | |
| 1.3 | Relief and climate | |
| 1.4 | Drainage system | |
| **Unit-II : Natural Resources** | | **15** |
| 2.1 | Soils | |
| 2.2 | Natural vegetation | |
| 2.3 | Minerals | |
| 2.4 | Power resources | |
| **Unit-III : Human Resources** | | **15** |
| 3.1 | Population growth | |
| 3.2 | Distribution –urban-rural and population density | |
| 3.3 | Structure of population : Age-sex | |
| 3.4 | Occupational structure of population | |
| **Unit-IV :Agriculture, Fishing and Livestock Resources** | | **15** |
| 4.1 | Salient features of agriculture | |
| 4.2 | Agricultural regions, recent issues and policies | |
| 4.3 | Fisheries, recent issues and policies | |
| 4.4 | Livestock resources recent issues and policies | |

**REFERENCES:**


- Jaymala Diddee, S.R. Jog, V.S. Kale Geography of Maharashtra
- Johns: Economic Geography -
- Khullar: Geography of India
- Majid Hussein: Geography of India
- Oxford: Oxford School atlas-
- Savinder Singh Environmental Geography
- Sharma: India's economic and commercial geography
- economic and commercial geography

# TOOLS AND TECHNIQUES IN GEOGRAPHY FOR SPATIAL ANALYSIS-I (Practical)

## Discipline Specific Elective (DSE)

**Course Outcome:**

1. Learn to use various Projections and Cartographic Techniques.
2. Get acquainted with basic of Statistical data.
3. Understand the principles of surveying, its importance and utility in the geographical study.

## Modules at a Glance

### Tools and Techniques in Geography for Spatial Analysis-I (UGGEO503)

| Unit No. | Unit | Unit Wise Weightage of Marks (in %) |
|---|---|---|
| 1 | Map Projections | 12 |
| 2 | Map Basic | 12 |
| 3 | Survey of India Toposheet | 12 |
| 4 | Thematic maps and Surveying | 12 |
| 5 | Use of computers in geographical data representation | 12 |

## T.Y.B.A. GEOGRAPHY

# TOOLS AND TECHNIQUES IN GEOGRAPHY FOR SPATIAL ANALYSIS-I (Practical)

### Discipline Specific Elective (DSE)

### SEMESTER- V; COURSE CODE: UGGEO 503; COURSE CREDIT: 4

| | | Lectures |
|---|---|---|
| | **Unit –I Map Projections** | |
| 1.1 | Basic Concepts – Definition, scale, direction, azimuth, graticule, great circle, true meridian, types of projections, choice of projections | 09 |
| 1.2 | Zenithal Polar Projections – Equal Area, Equidistant | |
| 1.3 | Cylindrical Projections - Equal Area, Equidistant | |
| 1.4 | Conical Projections - One standard parallel, two standard parallel | |
| | **Unit-II Map Basic** | 09 |
| 2.1 | Basic elements of map and calculation or identification of relief, direction, bearing and distance | |
| 2.2 | Area calculation with square method and strip method | |
| 2.3 | Demarcation of watershed on toposheet, Tracing of stream network and contours | |
| | **Unit-III Survey of India Toposheet** | 09 |
| 3.1 | Signs and symbols, marginal information | |
| 3.2 | Study of physiography, drainage and vegetation (one full toposheet of hilly and plateau region each) | |
| 3.3 | Study of settlements – size, pattern, utilities (one full toposheet of plains and urban region each) | |
| 3.4 | Study of transport network (one full toposheet of plains and urban area each) | |
| | **Unit-III Thematic maps and Surveying** | 09 |
| 4.1 | Preparation of a district thematic maps with actual data- Dot and Pictogram | |
| 4.2 | Preparation of a district thematic maps with actual data- Choropleth and Isopleth | |
| 4.3 | Introduction to surveying | |
| 4.4 | Plane Table Survey and Prismatic Compass | |
| | **Unit-V Use of computers in geographical data representation** | 09 |
| 5.1 | Construction of line graphs & simple and multiple bar graphs using MS-excel | |
| 5.2 | Construction of divided bar graphs & pie charts using MS-excel | |
| 5.3 | Preparation of datasheet in SPSS | |
| 5.4 | Calculation of central tendency and standard deviation using SPSS | |

**REFERENCES:**

1. Karlekar Shrikant- Bhoogol shastratil Sanshodhan Paddhati,
2. Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).

3. NCERT - Textbook for Class-12, Practical Work in Geography Part II
4. Peter A. Rogerson - Statistical Methods for Geography, Sege Publishers -2001
5. Robinson A.H. - Elements of Cartography, Wiley
6. Sarkar Ashis - Practical Geography, Orient Black Swan – 2015
7. Sarkar Ashis –Quantitative Geography, Orient Black Swan – 2013
8. Singh R.L. & Singh P. B. - Elements of Practical Geography, Kalyani Publishers 2005
9. Stoddard Robert – Field techniques and research methods in geography, Geography faculty publication http://digitalcommons.unl.edu/geographyfacpub/26
10. publication http://digitalcommons.unl.edu/geographyfacpub/26

# REGIONAL PLANNING AND DEVELOPMENT

## Discipline Specific Elective (DSE)

**Course Outcome:**

1. To understand meaning and concept of Region, its types and problem associated with region.
2. Analyze region with respect to Geography, its Nature, Characteristics and Hierarchy.
3. Understanding Regional development, its concept, indicators and methods of measuring regional development.
4. Outlining Features, achievements and failure of regional planning.
5. Analysing micro level planning, the concept of urban fringe, its planning and problem associated with it.

## Modules at a Glance

### Regional Planning and Development (UGGEO504)

| Unit No. | Unit | Unit Wise Weightage of Marks (in %) |
|---|---|---|
| 1 | Understanding Regional Planning | 15 |
| 2 | Understanding of Region in Planning | 15 |
| 3 | Understanding Regional Development | 15 |
| 4 | Regional Planning in India | 15 |

## T.Y.B.A. GEOGRAPHY PAPER- VII

# REGIONAL PLANNING AND DEVELOPMENT

## SEMESTER- V; COURSE CODE: UGGEO 504; COURSE CREDIT: 04

| | UNIT – I: Understanding Regional Planning | No. of Lectures |
|---|---|---|
| 1.1 | Region: Concept, types and delineation | **15** |
| 1.2 | Planning: Concept, Types and Need | |
| 1.3 | Role of surveys and geospatial technology in regional planning | |
| 1.4 | Problems associated with regional planning | |
| | **UNIT – II: Understanding of Region in Planning** | **15** |
| 2.1 | Regional Planning: Concept, Nature, Relation with Geography | |
| 2.2 | Planning Regions: Need, characteristics and hierarchy | |
| 2.3 | Demarcation of planning regions: Principles, criteria and methods | |
| 2.4 | Perroux's Growth Pole Theory and regional planning | |
| | **UNIT – III: Understanding Regional Development** | **15** |
| 3.1 | Development: Concept and indicators | |
| 3.2 | Regional disparities in development: Concept and measurements | |
| 3.3 | Spatial and Non-Spatial Models of Development with Special Reference to Rostow's Model and Myrdal's Model | |
| 3.4 | Strategies for regional development | |
| | **UNIT – IV: Regional Planning in India** | **15** |
| 4.1 | Five-Year Plans: Features, achievements and failure | |
| 4.2 | Multi-level planning in India | |
| 4.3 | Planning regions of India | |
| 4.4 | Changing planning mechanism of India: NITI Ayog | |

**REFERENCES:**


1. Chand, Mahesh (2000): "Regional Planning In India", Allied Publishers Ltd., Mumbai
2. Chandana, R. C. (2016): "Regional Planning and Development", Kalyani Publishers, New Delhi
3. Dhamdhere, S. et al (2015): "Arthik Vikas Ani Niyojan", (Marathi), Diamond Publications, Pune
4. Dikshit, J. K. (2011): "The Urban Fringe of Indian Cities: Professor Jaymala Diddee Felicitation Volume", (ed.) Rawat Publications, Jaipur
5. Jhingan, M. L. (2017): "The Economics of Development and Planning", Vrinda Publications (P) Limited, Delhi
6. Kant, S. et al (2004): "Reinventing Regional Development: Festschrift to Honour Gopal Krishnan", (ed.) Rawat Publications, Jaipur
7. Misra, R. P. (2002): "Regional Planning", Concept Publishing Co., New Delhi
8. NITI Ayog (2017): "Three Year Action Plan (2017-18 to 2019-20)", NITI Ayog, New Delhi
9. Tiwari, R. C. (2016): "Geography of India", Pravalika Publications, Allahabad


**Books for further reading:**

1. Bhargava, G. (2001): "Development of India's Urban, Rural, and Regional Planning in
21st Century: Policy Perspective", Gyan Publishing House, Delhi
2. Datt, G. And Mahajan, A. (2016): "Datt and Sundaram's Indian Economy", S. Chand Publishing, New Delhi
3. Devi, Laxmi (2000): "Planning Development and Regional Disparities", (ed.) Anmol Publications, New Delhi
4. Dhamdhere, S. and Shinde, S. (2010): "Bhartiya Ani Jagtik Arthik Vikas" (Marathi), Diamond Publications, Pune
5. Hall, P. (2016): "Urban and Regional Planning" Routledge, London
6. Knowles, R and Wareing, J. (1996): "Economic and Social Geography", the Made
Simple Series, Rupa& Co., Calcutta
7. Sundaram, K. V. (1985): "Geography and Planning: Essays in Honour of Prof. V. L. S. PrakasaRao", Concept Publishing Co., New Delhi
8. Sundaram, K. V. (1989): "Regional Planning and Development: Essays on Space, Society, and Development in Honour of Professor R. P. Misra", Heritage Publishers, New Delhi
9. Vidyarthi, A. et al (2017): "Understanding India's New Approach to Spatial Planning and Development: A Spatial Shift?", Oxford University Press, New Delhi
10. Yojana, Monthly Journal Published in English and Marathi by Government of Maharashtra.

**IMPORTANT WEBSITES / WEB LINKS** mmrda.maharashtra.gov.in, niti.gov.in

6. Kant, S. et al (2004): "Reinventing Regional Development: Festschrift to Honour Gopal Krishnan", (ed.) Rawat Publications, Jaipur
9. Misra, R. P. (2002): "Regional Planning", Concept Publishing Co., New Delhi
10. NITI Ayog (2017): "Three Year Action Plan (2017-18 to 2019-20)", NITI Ayog, New Delhi
9. Tiwari, R. C. (2016): "Geography of India", Pravalika Publications, Allahabad

# GEOGRAPHY OF SETTLEMENTS
## Discipline Specific Elective (DSE)

**COURSE OUTCOMS**

- Acquire knowledge about Rural settlements- Definition, nature and characteristics (1)
- Analyse the morphology of rural settlements. (4)
- Learn the census categories of rural settlements and idea of social segregation. (1)
- Application of GIS in development of smart city (3)
- Implement the knowledge to develop ADARSH VILLEGE. (3)

## Modules at a Glance
## Geography of Settlements
### (UGGEO505A)

| Unit No. | Unit | Unit Wise Weightage of Marks (in %) |
|---|---|---|
| 1 | Introduction of Settlement Geography | 15 |
| 2 | Geography of Rural Settlements | 15 |
| 3 | Rural and Urban Settlements | 15 |
| 4 | Urban Settlements in India | 15 |

## T.Y.B.A. GEOGRAPHY PAPER- IV

# GEOGRAPHY OF SETTLEMENTS

### Discipline Specific Elective (DSE)

### SEMESTER- V; COURSE CODE: UGGEO 505A; COURSE CREDIT:04

| | | No. of Lectures |
|---|---|---|
| | **UNIT – I: Introduction of Settlement Geography** | |
| 1.1 | Settlement geography: definitions, nature and scope | **15** |
| 1.2 | Settlement types, their characteristics and differences | |
| 1.3 | Factors influencing growth and distribution of settlements | |
| 1.4 | Importance of settlement studies in geography | |
| | **UNIT – II: Geography of Rural Settlements** | **15** |
| 2.1 | Origin and growth of settlements - evolution of rural settlements | |
| 2.2 | Site and situation of rural settlements | |
| 2.3 | Classification of rural settlements on the basis of population and patterns | |
| 2.4 | Classification of rural settlements on the basis of spacing and functions: Case Study of Adarsh Village | |
| | **UNIT – III: Rural and Urban Settlements** | **15** |
| 3.1 | Distribution and density of rural settlements | |
| 3.2 | Structure of house and building materials in India | |
| 3.3 | Origin and growth of urban settlements | |
| 3.4 | Classification of urban settlements on the basis of culture and functions | |
| | **UNIT – IV: Urban Settlements in India** | **15** |
| 4.1 | Urbanization in India: Trends, patterns and types of towns | |
| 4.2 | Morphology of urban settlements in India (With reference to a port and inland City) | |
| 4.3 | Problems of Urban in Indian cities | |
| 4.4 | Smart city: Concept and need, Application of GIS in development of smart city. | |

**REFERENCES:**


- Desphpande, C. D. (2005): "Cities: A Geographical Study", Translated by V. G.Amrite, Manan Prakashan, Mumbai
- Gharpure, V. (2013): "Nagari Bhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur
- Gharpure, V. (2013): "Vasti Bhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur
- Gharpure, V. (2017): "Manavi Bhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur
- Ghosh. S. (2015): "Introduction to Settlement Geography", Orient Blackswan Private Limited, Hyderabad
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Publsiher, New Delhi.

- Knowles, R and Wareing, J. (1996): "Economic and Social Geography", the Made Simple Series, Rupa & Co., Calcutta
- Leong, Goh-Cheng and Morgan, G. (1994): "Human and Economic Geography", Oxford University Press, Oxford
- Noble, A. (1998): "Using Descriptive Models to Understand South Asian Cities", *Education About Asia*, Vol. 3, No. 3, Downloaded from http://aas2.asian-studies.org/EAA/EAA-Archives/3/3/205.pdf
- Siddhartha, K and Mukherjee, S. (2016): "Cities, Urbanisation and Urban Systems (Settlement Geography)", KitabMahal, Allahabad
- Singh, L. R. (2009): "Fundamentals of Human Geography", Sharda Pustak Bhawan, Allahabad
- Singh, R. Y. (2012): "Geography of Settlements", Rawat Publications, Jaipur
- Tiwari, R. C. (2016): "Geography of India", Pravalika Publications, Allahabad
- Thakur S. A. and others – "Settlement Geography"/ *Vasti Bhugol*- Konkan Geographers, Publication (2012)

**POLITICAL GEOGRAPHY**
## Discipline Specific Elective (DSE)

**Course Outcome:**

- 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

## Modules at a Glance
**POLITICAL GEOGRAPHY**
**[UGGEO505B]**

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Introduction of Political Geography | **15** |
| **2** | Approaches and Concepts in Political Geography | **15** |
| **3** | Frontiers and Boundaries | **15** |
| **4** | Geostrategic and Geopolitical Views | **15** |

# T.Y.B.A. GEOGRAPHY
## POLITICAL GEOGRAPHY
## Discipline Specific Elective (DSE)
## SEMESTER- V; COURSE CODE: UGGEO 505B; COURSE CREDIT: 04

| Units | Name of the Unit/Subunit | No of Lectures |
|---|---|---|
| | | |
| **Unit – 1. : Introduction of Political Geography** | | **15** |
| 1.1 | Definition, Nature and Scope of Political Geography | |
| 1.2 | Historical Development and Recent Trends in Political Geography | |
| 1.3 | Concept of state and factors | |
| 1.4 | Concept of Nation, Nation-State, and Nationalism | |
| | | |
| **Unit – 2. : Approaches and Concepts in Political Geography** | | **15** |
| 2.1 | Hartshorne's Fundamental Approach: Centrifugal and CentripetalForces | |
| 2.2 | Unified Field Theory | |
| 2.3 | Core Areas: Concept, Characteristics, and Distribution | |
| 2.4 | Capitals: Concept, Functions, and Classification | |
| | | |
| **Unit – 3. : Frontiers and Boundaries** | | **15** |
| 3.1 | Frontiers and Boundaries: Concepts and Distinction | |
| 3.2 | Functions of Frontiers and Boundaries | |
| 3.3 | Classification of Boundaries | |
| 3.4 | India's Boundaries: Characteristics and Disputes | |
| | | |
| **Unit – 4. : Geostrategic and Geopolitical Views** | | |
| 4.1 | Mackinder's Heartland and Spykman's Rimland Model | **15** |
| 4.2 | Geopolitics of Indian Ocean | |
| 4.3 | Geopolitics of International Water Disputes with Special Referenceto India | |
| 4.4 | Changing Political Map of India | |

# Reference Books:


- Adhikari, S. (2015): "Political Geography", Rawat Publications, Jaipur
- Adhikari, S. (2011): "Political Geography of India: A Contemporary Perspective",Sharda Pustak Bhawan, Allahabad
- Dikshit R. (1985): "Political Geography: A Contemporary Perspective" McGraw, Hill,New Delhi
- Dikshit, S. (1993): "Electoral Geography of India", Vishwavidyalaya Prakashan,Varanasi
- Dwivedi, R. (1996): "Political Geography" Chaitanya Prakshan, Allahabad
- Jones, M. (2004): "An Introduction to Political Geography: Space, Place and Politics",Routledge
- Muir, R. (1995): "Modern Political Geography", McMillan, London

- Painter, J. and Jeffrey, A. (2009): "Political Geography", Sage Publications


**GEOGRAPHY OF HEALTH**

## Generic Elective (GE)

## Course Outcome:

- Understand Relation of geography of health with other branches. (1)
- Describe the geographical aspects of disease diffusion.(2)
- Analyse the differences between communicable diseases non-communicable diseases.(4)
- Understand the Health Care Facilities (1)
- Knowledge about Pollution Syndrome(1)
- Understand the changing and future directions of the geography of health.(1)

## Modules at a Glance

**GEOGRAPHY OF HEALTH**

**[UGGEO506]**

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Introduction to Geography of Health | **15** |
| **2** | The Pollution Syndrome | **15** |
| **3** | Geography of Diseases | **15** |
| **4** | Health Care Facilities | **15** |

# T.Y.B.A. GEOGRAPHY
## GENERIC ELECTIVE (GE)
# GEOGRAPHY OF HEALTH
## SEMESTER- V; COURSE CODE: UGGEO 506; COURSE CREDIT: 03

| | **Unit I - Introduction to Geography of Health** | No of Lectures |
|---|---|---|
| 1.1 | Nature, scope and evolution geography of health | **10** |
| 1.2 | Conceptual background and components geography of health | |
| 1.3 | Significance and approaches geography of health | |
| 1.4 | Relation of geography of health with other branches of social science | |
| | **Unit- II -The Pollution Syndrome** | **10** |
| 2.1 | Air Pollution: Causes, Effects and remedial measures | |
| 2.2 | Water Pollution: Causes, Effects and remedial measures | |
| 2.3 | Radioactive Pollution: Causes, Effects and remedial measures | |
| 2.4 | Plastic Pollution: Causes, Effects and remedial measures | |
| | **Unit III - Geography of Diseases** | **10** |
| 3.1 | Weather-related diseases and climate change and Global health | |
| 3.2 | Types & Stages of diseases and their regional pattern | |
| 3.3 | Case studies of communicable diseases –Covid-19 and HIV – Aids | |
| 3.4 | Case studies of non-communicable diseases – cancer and malnutrition | |
| | **Unit IV - Health Care Facilities** | **15** |
| 4.1 | Health care facilities in India | |
| 4.2 | Spatial Distribution of governmental health care facilities in Maharashtra | |
| 4.3 | Health care policies in India | |
| 4.4 | Health Organizations: WHO, UNISEF, Red Cross Society and NGOs | |

**REFERENCES**


2. Alice E. Marczewski and Michael Kamrin: Toxicology for the Citizen.
3. B. Brockband, J.Cohrsson, and V.T. Covello: The Risk Assessment Manual: A Guide to Understanding and Using Health and Environmental Assessments
4. Marilyn O. Ruiz: Geography of Disease
5. Michael Emch, Elisabeth Dowling Root, and Margaret Carrel: Health and Medical Geography Fourth Edition
6. Rhonda Humbird: AP Environmental Science - Part 1: The Living World

# RESEARCH METHODOLOGY
## (Skill Enhancement Course)

**Course Outcome:**

- To understand the concepts in research methodology.
- To give basic information to the students about research.
- To get familiar with principles and techniques of research.
- To understand the process and value of geographical research.
- To develop skills for applying ICT in geography.
- To aware the students research methodology with recent technology

### Modules at a Glance
**RESEARCH METHODOLOGY**
**[UGGEO601]**

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Research Methodology in Geography | **15** |
| **2** | Data Collection and Processing | **15** |
| **3** | Data Analysis | **15** |
| **4** | Digital Data Analysis and Research Report Writing | **15** |

## T.Y.B.A. GEOGRAPHY
# RESEARCH METHODOLOGY
## (Skill Enhancement Course)
## SEMESTER- VI; COURSE CODE: UGGEO 601; COURSE CREDIT: 4

| Units | Name of the Unit/Subunit | No of Lectures |
|---|---|---|
| | **Unit-I Research Methodology in Geography** | 15 |
| 1.1 | Research in Geography: Concept, Types, Steps and Significance | |
| 1.2 | Research Methodology: Meaning and Types (Qualitative and Quantitative) | |
| 1.3 | Defining the Research Problem: Meaning, Need and Techniques | |
| 1.4 | Research Designs: Concept, Need and Features | |
| | **Unit-II Data Collection and Processing** | 15 |
| 2.1 | Sample Design, Measurement and Scaling | |
| 2.2 | Data Collection in Geography: Types and Methods | |
| 2.3 | Role of Internet in Research: Online Research Referencing (Shodhganga, INFLIBNET, Research Gate, Academia, Mendeley, etc.) | |
| 2.4 | 2.4 Data Processing: Editing, Coding, Classification and Tabulation | |
| | **Unit-III Data Analysis** | 15 |
| 3.1 | Data Analysis: Meaning, Significance and Types | |
| 3.2 | Using MS-Excel and SPSS for Data Analysis: Graphical, Descriptive and Inferential Statistical Representation | |
| 3.3 | Hypothesis: Meaning, Types, Levels of Significance, Degrees of Freedom and Errors | |
| 3.4 | Statistical Techniques for Hypothesis Testing | |
| | **Unit-IV Digital Data Analysis and Research Report Writing** | 15 |
| 4.1 | Techniques of Spatial and Non-spatial data Analysis in GIS Software (Q-GIS) | |
| 4.2 | Techniques of Data Analysis in Satellite Image Processing Software's (SAGA) | |
| 4.3 | Basics of Research Report Writing: Layout, Structure, Language, Bibliography, References and Footnotes | |
| 4.4 | Ethics in Research: Plagiarism | |

REFERENCES:


1. Selltiz, C.M. Jahoda, M. Deutsch and S. Research Methods in Social Relations, Holt, . New York, 1961.
2. Goode, W and P.K, Hatt Methods in Social Research, Mc Graw Hill, .Tokyo, 1962.
3. Harvey, David . Explanation in Geography, Edward Arnold, London, 1971
4. Chorley, R.J. and P. Hagg~tt (ed) Models in Geography, Methuen, London, 1967.
5. Minshull, R. Introduction to Models in Geography. Longman London, 1975.
6. Sheskin, I.M. Survey Research for Geographers Scientific Publisher, Jodhpur, 1987.
7. Kothari, C. R. Research Methodology: Methods and Techniques, Wishwa Prakashan, 1994.

# ECONOMIC GEOGRAPHY

## Discipline Specific Elective (DSE)

**Course Outcome:**

- To acquaint the students with distinct dimensions of India.
- To understand the economic setup of the country.
- To get information about air ways, railways, and road ways in India.
- To get information about transport and trade in India

### Modules at a Glance

**ECONOMIC GEOGRAPHY**

**[UGGEO602]**

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Introduction of Economic Geography | **15** |
| **2** | Economic Activities | **15** |
| **3** | Minerals and Industries | **15** |
| **4** | Transport and International Trade | **15** |

# T.Y.B.A. GEOGRAPHY
# ECONOMIC GEOGRAPHY
## Discipline Specific Elective (DSE)
## SEMESTER- VI; COURSE CODE: UGGEO 602; COURSE CREDIT: 04

| Units | Name of the Unit/Subunit | No of Lectures |
|---|---|---|
| | **Unit - 1. : Introduction of Economic Geography** | **15** |
| 1.1 | Definition, Nature, Scope and Branches of Economic Geography | |
| 1.2 | Approaches of Economic Geography and Relation with other social sciences | |
| 1.3 | Concept and Operation of Economy | |
| 1.4 | Resources: Concept, Classification and Importance in Economy | |
| | **Unit - 2. : Economic Activities** | **15** |
| 2.1 | Economic Activities: Type and Characteristics | |
| 2.2 | Factors Affecting Economic Activities | |
| 2.3 | Agriculture and Lumbering: Types and Distribution | |
| 2.4 | Fishing and Animal Husbandry: Types and Distribution | |
| | **Unit - 3. : Minerals and Industries** | **15** |
| 3.1 | Minerals: Importance, Characteristics and Distribution of Iron Ore, Manganese, Coal and Mineral Oil | |
| 3.2 | Factors Affecting Industrial Locations | |
| 3.3 | Weber's Industrial Location Theory | |
| 3.4 | Major Industrial Regions of the World | |
| | **Unit - 4. : Transport and International Trade** | **15** |
| 4.1 | Transportation: Importance and influencing factors | |
| 4.2 | Major Transport Patterns in the World | |
| 4.3 | Patterns of International Trade: Composition and Direction | |
| 4.4 | Major International Trade Organizations: WTO, OPEC, SAARC, G-20 and BRICS | |

**REFERENCE:**


1. Datt, G. And Mahajan, A. (2016): "Datt and Sundaram's Indian Economy", S. Chand Publishing, New Delhi
2. Drezee J and Sen A.: "Indian Economic Development and Social Opportunity", Oxford University Press, London
3. Gautam, A. (2010): "Advanced Economic Geography", ShardaPustakBhawan, Allahabad
4. Hartshorne T. & Alexander J.W.: "Economic Geography", Prentice New Delhi
5. Hodder, B. and Lee, R. (2008):"Economic Geography", Rawat Publishers, Jaipur

# TOOLS AND TECHNIQUES IN GEOGRAPHY FORSPATIAL ANALYSIS-II

**Discipline Specific Elective (DSE)**

**Course Outcome:** a student should develop the ability to:

1. Understand the Meaning and types of data and its presentation.
2. Understand and able to solve the examples of measures of central tendency, dispersion and deviation and correlation, regression and hypothesis testing.
3. Able to collect and analysis of data sampling.
4. Able to collect the field data, its processing and writing of research report

## Modules at a Glance

**TOOLS AND TECHNIQUES IN GEOGRAPHY FOR SPATIAL ANALYSIS-II**

**[UGGEO603]**

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Nature of data and central tendency | **12** |
| **2** | Dispersion and Deviation | **12** |
| **3** | Correlation, Regression & Hypothesis Testing | **12** |
| **4** | Sampling | **12** |
| **5** | Field work in Geography of any one place/village | **12** |

## T.Y.B.A. GEOGRAPHY

# TOOLS AND TECHNIQUES IN GEOGRAPHY FOR SPATIAL ANALYSIS-II (Practical)

### Discipline Specific Elective (DSE)

### SEMESTER- VI; COURSE CODE: UGGEO 603; COURSE CREDIT: 4

| | | No of Lectures |
|---|---|---|
| | **Unit -I Nature of data and central tendency** | |
| 1.1 | Meaning and types of data, variable, observation, observation value, simple, discrete data and continuous data | 12 |
| 1.2 | Frequency Distribution, Histogram, Frequency Polygon and Ogive | |
| 1.3 | Measures of Central Tendency- mean, median and mode | |
| | **Unit -II Dispersion and Deviation** | |
| 2.1 | Mean Deviation and Quartile Deviation | 12 |
| 2.2 | Standard Deviation | |
| 2.3 | Moving Averages (3 years and 5 years) | |
| | **Unit -III Correlation, Regression & Hypothesis Testing** | |
| 3.1 | Calculation of correlation coefficient - Pearson's and Spearman's methods | 12 |
| 3.2 | Regression analysis | |
| 3.3 | Chi square test | |
| | **Unit-IV Sampling** | |
| 4.1 | Sample and sample design in geography | 12 |
| 4.2 | Point sampling -Systematic and random | |
| 4.3 | Line sampling - Systematic and random | |
| 4.4 | Area sampling - Systematic and random | |
| | **Unit-V Field work in Geography of any one place/village** | |
| 5.1 | C**ollection of physiographic data** - Field observation, field sketching, collection of soil and rock samples, identification of vegetation etc. | 12 |
| 5.2 | C**ollection of socio-economic data** - interviews, questionnaire survey, visit to local governing office, NGO's etc. | |
| 5.3 | C**ollection of geospatial data** - toposheet, aerial photographs, Google images/maps, Bhuvan images etc. | |

**REFERENCES:**


1. Karlekar Shrikant- Bhoogol shastratil Sanshodhan Paddhati, Diamond Publications.
2. Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
3. NCERT - Textbook for Class-12, Practical Work in Geography Part II
4. Peter A. Rogerson - Statistical Methods for Geography, Sege Publishers -2001
5. Robinson A.H. - Elements of Cartography, Wiley
6. Sarkar Ashis - Practical Geography, Orient Black Swan – 2015
7. Sarkar Ashis –Quantitative Geography, Orient Black Swan – 2013
8. Singh R.L. & Singh P. B. - Elements of Practical Geography, Kalyani Publishers 2005
10. Stoddard Robert – Field techniques and research methods in geography, Geography

# GEOGRAPHY OF TOURISM and RECREATION

## Discipline Specific Elective (DSE)

**Course Outcome:** a student should develop the ability to:

- Understand the history of tourism
- Understand the types of tourism
- Study of new trends of tourism
- Get knowledge of tourism law

### Modules at a Glance

**GEOGRAPHY OF TOURISM and RECREATION**

**[UGGEO604]**

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Introduction to Tourism Geography | **15** |
| **2** | Types & Impact of Tourism | **15** |
| **3** | Infrastructure of Tourism and Ancillary Services | **15** |
| **4** | Planning of Tourism and Organization | **15** |

## T.Y.B.A. GEOGRAPHY

# GEOGRAPHY OF TOURISM and RECREATION

### Discipline Specific Elective (DSE)

### SEMESTER- VI; COURSE CODE: UGGEO 604; COURSE CREDIT: 04

| | | TOTAL LECTURES |
|---|---|---|
| | **Unit-I -Introduction to Tourism Geography** | |
| 1.1 | Definition , Nature and Scope | **12** |
| 1.2 | Trends of Tourism Development in World | |
| 1.3 | Factors of Tourism Development - Geographical components | |
| 1.4 | Factors of Tourism Development - Socio-cultural and political | |
| | **Unit-II Types & Impact of Tourism** | **12** |
| 2.1 | Types of Tourism, | |
| 2.2 | New Trends in Tourism, | |
| 2.3 | Positive impact of Tourism on Environment: Socio-culture and Economy | |
| 2.4 | Negative Impact of Tourism on Environment: Socio-culture and Economy | |
| | **Unit-III - Infrastructure of Tourism and Ancillary Services** | **12** |
| 3.1 | Accommodation | |
| 3.2 | Transportation | |
| 3.3 | Travel Agencies and Tour Guide | |
| 3.4 | Documentation and Ticketing | |
| | **Unit-IV - Planning of Tourism and Organization** | **12** |
| 4.1 | Need of Planning and Elements of Planning | |
| 4.2 | Levels of Planning | |
| 4.3 | Tourism Organizations - IATA, PATA, I.T.D.C. and M.T.D.C | |
| 4.4 | Incredible India campaign | |

**REFERENCES:**


1. Anand M.M., Tourism & Hotel Industry in India, Prentice Hall of India, New Delhi,
2. Bhatia A.K., Tourism Development, Sterling Publishers Pvt. Ltd. New Delhi.
3. Bhatia A.K., International Tourism, Sterling Publishers Pvt. Ltd. New Delhi
4. Bhatia A.K.,- Tourism in India , Sterling Publishers Pvt. Ltd. New Delhi
5. Geetanjali, Tourism Geography, Centrum press publishers, New Delhi
6. T.K. Sathyadev, P. Manjunath- Tourism Planning, Pacific books Internationals,

# BIOGEOGRAPHY

## Discipline Specific Elective (DSE)

**Course Outcome:** a student should develop the ability to:

1. Understand the varied ecosystems and classify them. (4)
2. Recognize the significance of biodiversity.(4)
3. Identify the devastating impact of Biodiversity loss.(1)
4. Students will be able to discuss about ecosystem . (2)
5. They can identify Plant Community. (1)

### Modules at a Glance

# BIOGEOGRAPHY

### [UGGEO605A]

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Introduction to Biogeography | **15** |
| **2** | Ecosystem and Biosphere | **15** |
| **3** | Plant Community and Marine Biogeography | **15** |
| **4** | Biodiversity | **15** |

# T.Y.B.A. GEOGRAPHY
# BIOGEOGRAPHY
## SEMESTER- VI; COURSE CODE: UGGEO 605A; COURSE CREDIT: 04

| | **Unit-I: Introduction to Biogeography** | **No of Lectures** |
|---|---|---|
| 1.1 | Biogeography-Concept, definition, nature and scope | **12** |
| 1.2. | Historical development and branches of Biogeography | |
| 1.3. | Approaches in Biogeography | |
| 1.4. | Importance of Biogeographic studies | |
| | **Unit-II: Ecosystem and Biosphere** | **12** |
| 2.1. | Ecosystem: Concept, meaning and types | |
| 2.2. | Components of ecosystem and ecosystem productivity | |
| 2.3. | Biosphere: Concept, meaning and components | |
| 2.4. | Biogeographic processes | |
| | **Unit -III: Plant Community and Marine Biogeography** | **12** |
| 3.1. | Concept of plant community and classification of plants | |
| 3.2. | Biotic succession and climax vegetation | |
| 3.3. | Marine Biogeography meaning and concept | |
| 3.4. | Types of ocean habitats | |
| | **Unit-IV: Biodiversity** | **12** |
| 5.1. | Meaning and types of Biodiversity | |
| 5.2. | Importance of Biodiversity | |
| 5.3. | Causes of Biodiversity loss | |
| 5.4 | Biodiversity conservation | |

**REFERENCES:**


1. Flannery, T. 2015. The Eternal Frontier: An Ecological History of NorthAmerica and Its Peoples. Grove/Atlantic, Inc.
2. Gavin, D. G. 2012. Biogeography. Pages 77-89 in J. P. Stoltman, editor. 21st CenturyGeography: A Reference Handbook. SAGE Publications, Thousand Oaks, CA.
3. Jackson, S. T. 2004. Quaternary biogeography: Linking biotic responses toenvironmental variability across timescales. Pages 45
4. M. V. Lomolino and L. R. Heaney, editors. Frontiers of Biogeography: New Directionsin the Geography of Nature. Sinauer, Sunderland,
5. Lomolino, M. V., B. R. Riddle, J. H. Brown, and R. J. Whittaker. 2010. Biogeography.Fourth Edition. Sinauer Associates, Sunderland,
6. MacDonald, G. M. 2003. Biogeography: Space, Time and Life. Wiley, New York.

# GEOGRAPHY OF RESOURCES

## Discipline Specific Elective (DSE)

**Course Outcome:** a student should develop the ability to:

1. Classify the resource and its classification.
2. Justify over exploitation and conservation measures.
3. Analyze the issues related to water, forest soil minerals and energy resource.
4. Discuss Population Resource regions.

### Modules at a Glance

**GEOGRAPHY OF RESOURCES**

**[UGGEO605B]**

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Introduction to the Resources | **15** |
| **2** | Natural resources: over exploitation and conservation measures | **15** |
| **3** | Natural Resources, Part –I | **15** |
| **4** | Natural Resources Part –II | **15** |

# T.Y.B.A. GEOGRAPHY
# GEOGRAPHY OF RESOURCES
## Discipline Specific Elective (DSE)
## SEMESTER- VI; COURSE CODE: UGGEO 605B; COURSE CREDIT: 04

| UNIT – I: Introduction to the Resources | | TOTAL LECTURES |
|---|---|---|
| 1.1 | Meaning and importance of the natural resources | **12** |
| 1.2 | Factors influencing on resource utilization and related theories | |
| 1.3 | Classification of resources | |
| 1.4 | Issues with renewable and non-renewable resources | |
| **UNIT – II: Natural resources: over exploitation and conservation measures** | | **12** |
| 2.1 | Over exploitation and depletion of natural resources | |
| 2.2 | Resource consumption pattern in the developed and underdeveloped countries | |
| 2.3 | Need and measures for resource conservation | |
| 2.4 | Sustainable use of natural resources | |
| **UNIT – III: Natural Resources, Part –I** | | **12** |
| 3.1 | Distribution of water resources on the Earth | |
| 3.2 | Water consumption pattern, water pollution and water conservation | |
| 3.3 | Distribution of forest resources in the world | |
| 3.4 | Deforestation and forest conservation | |
| **UNIT – IV: Natural Resources Part –II** | | **12** |
| 4.1 | Soil composition and factor affecting soil formation | |
| 4.2 | Soil degradation and its conservation | |
| 4.3 | Minerals and their classification | |
| 4.4 | Use of energy minerals and their conservation | |

## Reference Books:


1. Chandna R.C. (2014): Geography of Population, Kalyani Publishers, Ludhiana, India

2. Gautam Alka (2010) Environmental Geography: Sharda Pustak Bhavan, Allahabad
3. GautamAlka: 2013: Advanced Economic Geography, Sharda Pustak Bhawan, Allahabad,India, Third Edition
4. Gautam Alka: Resource Geography, Sharda Pustak Bhawan, Allahabad, India,

5. Husain Majid, 2003: Resources Geography, Anmol Publications Pvt. Ltd. (2003)ISBN: 9788170418764
6. Khullar D. R. (2014) India: A Comprehensive Geography, Kalyani Publishers, ISBN-13**:** 978-9327246759
7. Mondal P and Dalai (2017) Sustainable Utilization of Natural Resources: CRC Press (2017)ISBN 9781498761833
8. Singh Savinder (2015): Environmental Geography: Prayag Pustak Company, Allahabad

9. Singh Vipul (2012) The Human Footprint on Environment: Issues in India, MacmillanPublishers India Pvt. Ltd, ISBN: 935-059-098-0
10. Verma C.L. (2014): Economic and Resource Geography, Forward Books; 1ST edition (2014)ISBN-10: 9381763534
11. Website: https://www.researchgate.net/publication/280298490_Resource_Geography

12. William A.: Nonfuel Minerals and the World Economy", Vogely, World Resources InstituteBook Yale University Press

# ENVIRONMENTAL GEOGRAPHY

## Generic Elective (GE)

**Course Outcome:** a student should develop the ability to:

- Understand Nature, scope and importance Environmental Geography.
- Study about ecosystem
- Acquire knowledge about biodiversity.
- Understand environmental problems there Cause, Effect and Remedies.
- Adapt knowledge about Sustainable Development and Environmental Management
- Understand the various environmental protection acts

## Modules at a Glance

### ENVIRONMENTAL GEOGRAPHY

### [UGGEO606]

| Unit No | Unit | Unit Wise Weightage Of Marks (In %) |
|---|---|---|
| **1** | Introduction to Environmental Geography | **15** |
| **2** | Ecosystem | **15** |
| **3** | Environmental Challenges in India | **15** |

# T.Y.B.A. GEOGRAPHY
# ENVIRONMENTAL GEOGRAPHY
## Generic Elective (GE)
## SEMESTER- VI; COURSE CODE: UGGEO 606; COURSE CREDIT: 03

| | UNIT -I Introduction to Environmental Geography | No. of Lectures |
|---|---|---|
| 1.1 | Environmental Geography: Definition, Nature, Scope and Importance | **15** |
| 1.2 | Environment: Meaning, Factors and Types | |
| 1.3 | Approaches to the Study of Man - Environment Relationship | |
| 1.4 | Changing Man - Environment Relationship in Historical Perspective | |
| | **UNIT-II Ecosystem** | **15** |
| 2.1 | Meaning and Structure of Ecosystem | |
| 2.2 | Ecological Pyramids and Productivity of Ecosystem | |
| 2.3 | Functions of Ecosystem: Food Chain & Web, Energy Transfer, Biogeochemical Cycles | |
| 2.4 | Types of Ecosystems: Aquatic, Terrestrial, and Aqua-Terrestrial Ecosystems | |
| | **UNIT-III Environmental Challenges in India** | **15** |
| 3.1 | Air pollution and Water Pollution: Causes and Effects | |
| 3.2 | Land and Noise Pollution: Causes and Effects | |
| 3.3 | Environmental Issues Related to large Dams | |
| 3.4 | Major environmental Movements in India | |

**REFERENCES:**


1. Bharucha, E. (2004): "A Textbook for Environmental Studies", University Grants Commission, New Delhi, Downloaded from https://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf
2. Cunningham, W, and Cunnigham, M. (2017): "Principles of Environmental Science: Inquiry and Applications", McGraw Hill Education, Delhi
3. Gautam, A. (2010): "Environmental Geography", Sharda Pustak Bhavan,Allahabad
4. Karlekar, S. and Borges, J. (2008): "Diamond Bhugol- Paryavaran ShatraKosh", (Marathi), Diamond Publications, Pune
5. Rajagopalan, R. (2016): "Environmental Studies: From Crisis to Core",Oxford University Press, New Delhi
6. Sangle, S. (2017): "Paryavaran Bhugol", (Marathi), Diamond Publications,Pune
7. Saxena, H. (2017): "Environmental Geography", Rawat Publishers, Jaipur.
8. Singh, S. (2017):"Environmental Geography", Prayag Pustak Bhawan,Allahabad
9. Parmar and other –"Pryavaran Bhugol" Himalaya Publishing House Mumbai 2013
10. Thakur and other - –"Pryavaran Bhugol" Konkan Geographer's Publication

Rayat Shikshan Sanstha's

# Karmaveer Bhaurao Patil College, Vashi

(Autonomous College)

## TYBA Geography Paper- II and III Evaluation Pattern

**SCHEME OF EXAMINATION:**

The performance of the learners shall be evaluated into two parts viz continuous Internal Evaluation and Semester End examination. In both semester internal assessment with 40% marks and semester End Examinations with 60% marks. The allocation of marks for the Continuous Internal Assessment and Semester End Examinations are as shown below:-

**CONTINUOUS INTERNAL ASSESSMENT- 40 MARKS**

Practical Component will ask for Internal Examination and it will be conducted separately

| **Evaluation type** | **Marks** |
|---|---|
| Internal Evaluation | **40** |
| a. Practical + Journal | 20 |
| b. Class Room Presentation | 10 |
| c. Field Visit and report writing<br>Viva<br>Assignments<br>PPT presentation<br>Quiz competition<br>Online courses<br>Knowledge sharing<br>Innovative Ideas<br>Active participation | 10 |

## SEMESTRER END EXAMINATION- 60 MARKS

- Duration – 2 Hours for each paper.
- All questions shall be compulsory with internal choice within the questions.
- Questions shall be subdivided into sub-questions

| Q. No. | Type of Question | Marks |
|---|---|---|
| Q. 1<br>Based on Unit-I | A)<br>B)<br>C)<br>D) Any Two | 12 Marks |
| Q.2<br>Based on Unit-II | A)<br>B)<br>C)<br>D) Any Two | 12 Marks |
| Q.3<br>Based on Unit-III | A)<br>B)<br>C)<br>D) Any Two | 12 Marks |
| Q.4<br>Based on Unit-IV | A)<br>B)<br>C)<br>D) Any Two | 12 Marks |
| Q.5<br>Based on All Unit | A) MCQ<br>B) True or False | 12 Marks |