



**Rayat Shikshan Sanstha's
KARMAVEER BHURAO 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 Credit Based Semester and Grading System
with effect from the academic year 2020-21)

Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College, Vashi
(Autonomous College)
Department of Geography
Program: TYBA
Course: Geography

Details of Semester wise Course and Credits

Course Code	Course Title	Course Credit
SEMESTER - V		
UGGEO 501	Geography of Settlements	04
UGGEO 502	Geography of Maharashtra	04
UGGEO 503	Tools and Techniques in Geography for Spatial Analysis-I (Practical)	3.5
UGGEO 504	Regional Planning and Development	04
UGGEO 505	Geography of Health	04
UGGEO 506	Geospatial Technology (Practical)	3.5
Total Credits		23
SEMESTER- VI		
UGGEO 601	Environmental Geography	04
UGGEO 602	Geography of Tourism and Recreation	04
UGGEO 603	Tools and Techniques in Geography for Spatial Analysis-II (Practical)	3.5
UGGEO 604	Economic Geography	04
UGGEO 605	Biogeography	04
UGGEO 606	Research Methodology in Geography (Practical)	3.5
Total Credits		23
Total Credits (Semester V and VI)		46

T.Y.B.A. GEOGRAPHY PAPER- IV
GEOGRAPHY OF SETTLEMENTS
SEMESTER- V; COURSE CODE: UG GEO 501; COURSE CREDIT: 04

UNIT – I: Introduction of Settlement Geography		No. of Lectures
1.1	Settlement geography: definitions, nature and scope	12
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		12
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 Settlements in India		12
3.1	Distribution and density of rural settlements in India	
3.2	Structure of house and building materials in India	
3.3	Regional variations in rural settlement patterns in India	
3.4	Morphology of rural settlement in India	
UNIT – IV: Urban Settlements		12
4.1	Origin and growth of urban settlements	
4.2	Classification of urban settlements on the basis of culture and functions	
4.3	Hierarchy of urban Settlement: rank size rule and primate city	
4.4	Ashok Dutts’s models of South Asian city: port city and bazaar city	
UNIT – V: Urban Settlements in India		12
5.1	Urbanization in India: Trends, patterns and types of towns	
5.2	Morphology of urban settlements in India (With reference to a port and inland City)	
5.3	Urban problems in Indian cities	
5.4	Smart city: Concept and need	

Blue highlighted topic/ course has focus on employability/ entrepreneurship /skill development

Yellow highlighted topic/ course is related to professional ethics, gender, human values ,and government and sustainability

Green highlighted topic/ course is related to local/ National regional/ and global development needs

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- Gharpure, V. (2013): “Nagari Bhugol”, (Marathi) Pimpalpure and Company Publishers, Nagpur
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- Ghosh. S. (2015): “Introduction to Settlement Geography”, Orient Blackswan Private Limited, Hyderabad
- Jyptirmoy Sen (2007): A Text Book of Social and Cultural Geography,” Kalyani 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)

T.Y.B.A. GEOGRAPHY PAPER- V
GEOGRAPHY OF MAHARASHTRA
SEMESTER- V; COURSE CODE: UG GEO 502; COURSE CREDIT: 04

Unit-I : Maharashtra: Geographical Setting		No of Lectures
1.1	Location, extent and boundaries	12
1.2	Administrative setup and divisions	
1.3	Relief and climate	
1.4	Drainage system	
Unit-II : Natural Resources		12
2.1	Soils	
2.2	Natural vegetation	
2.4	Power resources	
Unit-III : Human Resources		12
3.1	Population growth	
3.2	Distribution –urban-rural and population density	
3.4	Occupational structure of population	
Unit-IV :Agriculture, Fishing and Livestock Resources		12
4.1	Salient features of agriculture	
4.2	Agricultural regions, recent issues and policies	
4.4	Livestock resources recent issues and policies	
Unit-V: Industries, Trade and Transport		12
5.1	Major industrial regions	
5.2	Role of transport in industrial development	
5.4	Trade and transport	

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Yellow highlighted topic/ course is related to professional ethics, gender, human values ,and government and sustainability

Green highlighted topic/ course is related to local/ National regional/ and global development needs

REFERENCES:

- Jaymala Diddie, 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

T.Y.B.A. GEOGRAPHY PAPER- VI
TOOLS AND TECHNIQUES IN GEOGRAPHY FOR
SPATIAL ANALYSIS-I (Practical)
SEMESTER- V; COURSE CODE: UG GEO 503; COURSE CREDIT: 3.5

Unit –I Map Projections		Lectures
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	

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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>

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	12
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		12
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		12
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 – I		12
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	
UNIT – V: Regional Planning in India – II		12
5.1	Micro level planning in rural area	
5.2	Backward area development programme	
5.3	Urban fringe of Indian cities: Problems and planning	
5.4	Metropolitan Planning: A Case study of Navi Mumbai	

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REFERENCES:

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2. Chandana, R. C. (2016): “Regional Planning and Development”, Kalyani Publishers, New Delhi
3. Dhamdhare, 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
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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
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6. Knowles, R and Wareing, J. (1996): “Economic and Social Geography”, the Made Simple Series, Rupa& Co., Calcutta
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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

T.Y.B.A. GEOGRAPHY PAPER- VIII
GEOGRAPHY OF HEALTH
SEMESTER- V; COURSE CODE: UG GEO 505; COURSE CREDIT: 04

Unit I - Introduction to Geography of Health		No of Lectures
1.1	Nature, scope and evolution geography of health	12
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		12
2.1	Air Pollution: Causes, Effects and remedial measures	
2.2	Water Pollution: Causes, Effects and remedial measures	
2.4	Plastic Pollution: Causes, Effects and remedial measures	
Unit III - Geography of Diseases		12
3.1	Weather-related diseases and climate change and Global health	
3.2	Types of diseases and their regional pattern	
3.4	Case studies of non-communicable diseases – cancer and malnutrition	
Unit IV -Health and Environment		12
4.1	Linkages of health with environment	
4.2	Relation between development and health	
4.4	Migration and related health issues	
Unit V - Health Care Facilities		12
5.1	Health care facilities in India	
5.2	Spatial Distribution of governmental health care facilities in Maharashtra	
5.4	Health Organisations: WHO, UNISEF, Red Cross Society and NGOs	

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

T.Y.B.A. GEOGRAPHY PAPER- IX
GEOSPATIAL TECHNOLOGY
SEMESTER- V; COURSE CODE: UGGEO 506; COURSE CREDIT: 3.5

UNIT – I Remote Sensing – I		No of Lectures
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	

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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
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5. Bhatia, S. C. (2008): Fundamentals of Remote Sensing, Atlantic Publishers and Distributors (P) Limited, New Delhi.
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8. Bernhardsen, Tor (2002): Geographical Information Systems: An Introduction, Third Edition, John Wiley & Sons, Inc., New York.
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12. Central Board of Secondary Education (New Delhi): Geospatial Technology – Textbook, Class XI and XII

T.Y.B.A. GEOGRAPHY PAPER- IV
ENVIRONMENTAL GEOGRAPHY
SEMESTER- VI; COURSE CODE: UG GEO 601; COURSE CREDIT: 04

UNIT -I Introduction to Environmental Geography		No. of Lectures
1.1	Environmental Geography: Definition, Nature, Scope and Importance	12
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		12
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 Biodiversity		12
3.1	Biodiversity: Concept, Types and Distribution	
3.2	Biodiversity Hotspots: Concept, and Distribution in India with Special Reference Western Ghats	
3.3	Threat to Biodiversity: Causes	
3.4	Conservation of Biodiversity and Management of Biological Reserves	
UNIT-IV Environmental Challenges in India		12
4.1	Air pollution and Water Pollution: Cases and Effects	
4.2	Land and Noise Pollution: Cases and Effects	
4.3	Environmental Issues Related to High/large Dams	
4.4	Major environmental Movements in India	
UNIT-V Sustainable Development and Environmental Management		12
5.1	Concepts and Need of Sustainable Development and Environmental Management	
5.2	Eco-friendly Lifestyle and Need of Environmental Education	
5.3	Biosphere Reserves and Wildlife Management in India	
5.4	Environmental Impact Assessment	

Yellow highlighted topic/ course is related to professional ethics, gender, human values ,and environment and sustainability

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
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4. Karlekar, S. and Borges, J. (2008): "Diamond Bhugol- Paryavaran Shatra Kosh", (Marathi), Diamond Publications, Pune
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10. Thakur and other - – "Pryavaran Bhugol" Konkan Geographer's Publication

T.Y.B.A. GEOGRAPHY PAPER- V
GEOGRAPHY OF TOURISM and RECREATION
SEMESTER- VI; COURSE CODE: UG GEO 602; COURSE CREDIT: 04

Unit-I -Introduction to Tourism Geography		TOTAL LECTURES
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	
Unit-V Potential Tourism Sectors in Maharashtra and Tourism Policy		12
5.1	Coastal tourism in Maharashtra	
5.2	Adventure tourism in Sahyadri	
5.3	Heritage tourism in Maharashtra	
5.4	Tourism Policy of Maharashtra State	

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Green highlighted topic/ course is related to local/ National regional/ and global development needs

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,

T.Y.B.A. GEOGRAPHY PAPER- VI
TOOLS AND TECHNIQUES IN GEOGRAPHY FOR
SPATIAL ANALYSIS-II (Practical)
SEMESTER- VI; COURSE CODE: UG GEO 603; COURSE CREDIT: 3.5

Unit -I Nature of data and central tendency		No of Lectures
1.1	Meaning and types of data, variable, observation, observation value, simple, discrete data and continuous data	09
1.2	Frequency Distribution, Histogram, Frequency Polygon and Ogive	
1.3	Measures of Central Tendency- mean, median and mode	
Unit -II Dispersion and Deviation		09
2.1	Mean Deviation and Quartile Deviation	
2.2	Standard Deviation	
2.3	Moving Averages (3 years and 5 years)	09
Unit -III Correlation, Regression & Hypothesis Testing		
3.1	Calculation of correlation coefficient - Pearson's and Spearman's methods	
3.2	Regression analysis	09
3.3	Chi square test	
Unit-IV Sampling		09
4.1	Sample and sample design in geography	
4.2	Point sampling -Systematic and random	
4.3	Line sampling - Systematic and random	
4.4	Area sampling - Systematic and random	09
Unit-V Field work in Geography of any one place/village		
5.1	Collection of physiographic data - Field observation, field sketching, collection of soil and rock samples, identification of vegetation etc.	
5.2	Collection of socio-economic data - interviews, questionnaire survey, visit to local governing office, NGO's etc.	09
5.3	Collection of geospatial data - toposheet, aerial photographs, Google images/maps, Bhuvan images etc.	

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REFERENCES:

1. Karlekar Shrikant- Bhoogol shastratil Sanshodhan Paddhati, Diamond Publications.
2. Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
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7. Sarkar Ashis –Quantitative Geography, Orient Black Swan – 2013
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9. Stoddard Robert – Field techniques and research methods in geography, Geography

**T.Y.B.A. GEOGRAPHY PAPER- VII
ECONOMIC GEOGRAPHY
SEMESTER- VI; COURSE CODE: UG GEO 604; COURSE CREDIT: 04**

Units	Name of the Unit/Subunit	No of Lectures
Unit - 1. : Introduction of Economic Geography		
1.1	Definition, Nature, Scope and Branches of Economic Geography	12
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		
2.1	Economic Activities: Type and Characteristics	12
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		
3.1	Minerals: Importance, Characteristics and Distribution of Iron Ore, Manganese, Coal and Mineral Oil	12
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		
4.1	Transportation: Importance and influencing factors	12
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	
Unit - 5 : Economic Development of India		
5.1	Levels of Economic Development in India	12
5.2	Globalization and its impact on Indian economy	
5.3	Special Economic Zones: Concept and issues in India	
5.4	Environment and Economic Development and related issues	

Blue highlighted topic/ course has focus on employability/ entrepreneurship /skill development

Yellow highlighted topic/ course is related to professional ethics, gender, human values ,and environment and sustainability

Green highlighted topic/ course is related to local/ National regional/ and global development needs

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T.Y.B.A. GEOGRAPHY PAPER- VIII
BIOGEOGRAPHY
SEMESTER- VI; COURSE CODE: UG GEO 605; 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		12
3.1.	Concept of plant community and classification of plants	
3.2.	Biotic succession and climax vegetation	
3.3.	Major plant formation and biomes- Tropical	
3.4.	Major plant formation and biomes- Temperate	
Unit -IV: Marine Biogeography		12
4.1.	Marine Biogeography meaning and concept	
4.2.	Types of ocean habitats	
4.3.	Biogeography of estuaries	
4.4.	Island biogeography	
Unit-V: Biodiversity		12
5.1.	Meaning and types of Biodiversity	
5.2.	Importance of Biodiversity	
5.3.	Causes of Biodiversity loss	
5.4	Biodiversity conservation	

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Green highlighted topic/ course is related to local/ National regional/ and global development needs

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1. Flannery, T. 2015. *The Eternal Frontier: An Ecological History of North America and Its Peoples*. Grove/Atlantic, Inc.
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3. Jackson, S. T. 2004. *Quaternary biogeography: Linking biotic responses to environmental variability across timescales*. Pages 45
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T.Y.B.A. GEOGRAPHY PAPER- IX
RESEARCH METHODOLOGY IN GEOGRAPHY
(Practical)
SEMESTER- VI; COURSE CODE: UG GEO 606; COURSE CREDIT: 3.5

Units	Name of the Unit/Subunit	No of Lectures
Unit-I Research Methodology in Geography		
1.1	Research in Geography: Concept, Types, Steps and Significance	09
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		
2.1	Sample Design, Measurement and Scaling	09
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		
3.1	Data Analysis: Meaning, Significance and Types	09
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		
4.1	Techniques of Spatial and Non-spatial data Analysis in GIS Software (Q-GIS)	09
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	
Unit-V Preparation of Research Report		
5.1	Research Report on any One Theme in Physical Geography or Human Geography	09

Blue highlighted topic/ course has focus on employability/ entrepreneurship /skill development

REFERENCES:

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Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College, Vashi
(Autonomous College)
TYBA Geography Theory Papers
(With effect from the academic year 2020-21)
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. Online Examination	20
b. Class Room Presentation - PPT/ Oral/ Projects	10
c. Field Visit and report writing Viva Assignments PPT presentation Oral presentation Quiz competition Online courses Knowledge sharing Innovative Ideas Participation in seminar / workshop	10

Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College, Vashi
(Autonomous College)

TYBA Geography Practical Paper- VI and IX
(With effect from the academic year 2020-21)

Evaluation Pattern

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	20
b. Problem Solving / viva / Projects /Digitization of map	10
c. Field Visit and report writing Viva Assignments PPT presentation Oral presentation Quiz competition Online courses Knowledge sharing Innovative Ideas Participation in seminar / workshop	10

Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College, Vashi
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TYBA Geography Theory Papers
(With effect from the academic year 2020-21)
Evaluation Pattern

SEMESTER END EXAMINATION- 60 MARKS

- Duration – 2 Hours for each paper.
- There shall be eight questions each question and each questions carry 15 marks.
- All questions shall be compulsory with internal choice within the questions.
- Questions shall be subdivided into sub-questions

Questions	Sub-questions	Questions	Marks
1	a) OR b)	Based on Unit - I	15
2	a) OR b)	Based on Unit – II	15
3	a) OR b)	Based on Unit – III	15
4	a) OR b)	Based on Unit – IV	15

Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College, Vashi
(Autonomous College)

TYBA Geography Practical Paper – VI and IX
(With effect from the academic year 2020-21)

Evaluation Pattern

SEMESTER END EXAMINATION- 60 MARKS

- Duration – 3 Hours for each paper.
- There shall be six questions each question and each questions carry 10 marks.
- All questions shall be compulsory with internal choice within the questions.
- Questions shall be subdivided into sub-questions
- **External Examiner will be appointed from home university**

Questions	Sub-questions	Questions	Marks
1	A) And B)	Based on Unit - I	12
2	A) And B)	Based on Unit – II	12
3	A) And B)	Based on Unit – III	10
4	A) And B)	Based on Unit – IV	10
5	A) And B)	Evaluation of Project + Journal + Viva	08+04+04