

UNIVERSITY OF MUMBAI



SYLLABUS FOR THIRD YEAR BACHELOR OF ARTS AND

BACHELOR OF SCIENCE

Program: T.Y.B.A. and T.Y. B.Sc.

Course: Geography

Semester - V and VI at the T.Y.B.A. and T.Y. B.Sc.

Paper IV to IX

**(Credit Based Semester and Grading System (CBSGS) with
effect from the academic year 2018-19)**

University of Mumbai
Revised Syllabus w.e.f. Academic Year, 2018-19 (CBSGS)

T.Y.B.A. / T.Y.B.Sc. Geography, Semester – V, Paper – IV

Subject Title: GEOGRAPHY OF SETTLEMENTS

COURSE CODE: _____ (2018-19), 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	
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	Urbanisation 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, need and implementation in India	

REFERENCES:

- Deshpande, C. D. (2005): “Cities: A Geographical Study”, Translated by V. G. Amrite, Manan Prakashan, Mumbai
- Gharpure, V. (2013): “Nagari Bhugol”, (Marathi) Pimpalpure and Company Publishers, Nagpur
- Gharpure, V. (2013): “Vasti Bhugol”, (Marathi) Pimpalpure and Company Publishers, Nagpur
- Gharpure, V. (2017): “Manavi Bhugol”, (Marathi) Pimpalpure and Company Publishers, Nagpur
- 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)
- घारपुरे व ल (१९९९)वस्ती भूगोल, पंपळापुरे अँड कं.,नागपूर

- सावंत प्रकाश (१९९८) नागरी भूगोल, फडके प्रकाशन, कोल्हापूर
- सवदी ए.बी. (२०१०) नागरी भूगोल, निराली प्रकाशन, पुणे

QUESTION PAPER PATTERN:

Time: 3 hours		Marks; 100
N.B. 1. All questions are compulsory and carry equal marks. 2. Use of Map Stencils is permitted. 3. Draw sketches and diagrams wherever necessary.		
Q. 1	Long answer question on Unit-I	20 Marks
OR		
	Long answer question on unit –I for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 2	Long answer question on Unit-II	20 Marks
OR		
	Long answer question on unit –II for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 3	Long answer question on Unit-III	20 Marks
OR		
	Long answer question on unit –III for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 4	Long answer question on Unit-IV	20 Marks
OR		
	Long answer question on unit –IV for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 5	Long answer question on Unit-V	20 Marks
OR		
	Long answer question on unit –V for 20 Marks or Two short answer questions each 10 Marks	20 Marks

University of Mumbai
Revised Syllabus w.e.f. Academic Year, 2018-19 (CBSGS)
T.Y.B.A. / T.Y.B.Sc. Geography, Semester – V Paper: V-A
GEOGRAPHY OF MAHARASHTRA

COURSE CODE: _____, **Credit:** **_04_**

Unit-I : Maharashtra: Geographical Setting		TOTAL 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	
2.3	Minerals	
2.4	Power resources	
Unit-III : Human Resources		12
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		12
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	
Unit-V: Industries, Trade and Transport		12
5.1	Major industrial regions	
5.2	Role of transport in industrial development	
5.3	Industrial issues and policies	
5.4	Trade and transport	

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
- प्रा.सवदी: महाराष्ट्रभूगोल
- देशपांडेएसएस: महाराष्ट्राचेअर्थशास्त्र
- महाराष्ट्राचाभूगोल - प्रा.सी.डीदेशपांडे
- महाराष्ट्र- सवदीआ णकेचे
- महाराष्ट्राचाभूगोल - बी.अरुणाचलम
- महाराष्ट्र 2006 - संतोषदास्ताने
- जनगणनाऑटलस – महाराष्ट्रसरकार
- महाराष्ट्राचेनकाशे-डॉ.के.आरदि क्षत
- महाराष्ट्रातीलजलसंपदा- प्रा. डॉ.एस.व्ही.ढमढेरे
- महाराष्ट्रातीलनद्या – श्रीकांततापीकर
- महाराष्ट्राचाभूगोल – डॉ.सुरेशफुले

QUESTION PAPER PATTERN:

Time: 3 hours		Marks: 100
N.B. 1. All questions are compulsory and carry equal marks. 2. Use of Map Stencils is permitted. 3. Draw sketches and diagrams wherever necessary.		
Q. 1	Long answer question on Unit-I	20 Marks
OR		
	Long answer question on unit –I for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 2	Long answer question on Unit-II	20 Marks
OR		
	Long answer question on unit –II for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 3	Long answer question on Unit-III	20 Marks
OR		
	Long answer question on unit –III for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 4	Long answer question on Unit-IV	20 Marks
OR		
	Long answer question on unit –IV for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 5	Long answer question on Unit-V	20 Marks
OR		
	Long answer question on unit –V for 20 Marks or Two short answer questions each 10 Marks	20 Marks

University of Mumbai
Revised Syllabus w.e.f. Academic Year, 2018-19 (CBSGS)
T.Y.B.A. / T.Y.B.Sc. Geography, Semester – V. Paper No: VI

**Subject Title: TOOLS AND TECHNIQUES IN GEOGRAPHY FOR
SPATIAL ANALYSIS-I (Practical)**

COURSE CODE: _____, Credit: __03__

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	
	2.1. Basic elements of map and calculation or identification of relief, direction, bearing and distance	09
	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 Toposheets	
	3.1. Signs and symbols, marginal information	09
	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	Preparation of Thematic maps (Manually)	
	4.1. Preparation of a district thematic maps with actual data- Dot and Pictogram	09
	4.2. Preparation of a district thematic maps with actual data- Choropleth and Isopleth	
	4.3. Preparation of a district thematic maps with actual data- Located bar, located circle and pie chart	
Unit-V	Use of computers in geographical data representation	
	5.1. Construction of line graphs & simple and multiple bar graphs	09

	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 -

- Ahirrao ani Karanjkehele – प्रात्य क्षक भूगोल,
- Karlekar Shrikant- प्रात्य क्षक भूगोल, डायमंड पब्लिकेशन्स
- Karlekar Shrikant- Bhoogol shastratil Sanshodhan Paddhati, डायमंड पब्लिकेशन्स
- Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
- NCERT - Textbook for Class-12, Practical Work in Geography Part II
- Peter A. Rogerson - Statistical Methods for Geography, Sege Publishers -2001
- Robinson A.H. - Elements of Cartography, Wiley
- Sarkar Ashis - Practical Geography, Orient Black Swan – 2015
- Sarkar Ashis –Quantitative Geography, Orient Black Swan – 2013
- Singh R.L. & Singh P. B. - Elements of Practical Geography, Kalyani Publishers 2005
- Stoddard Robert – Field techniques and research methods in geography, Geography faculty publication <http://digitalcommons.unl.edu/geographyfacpub/26>
- Thakur S. A. - प्रात्य क्षक भूगोल, Konkan Geographer's publication (2016)

QUESTION PAPER PATTERN

(SEM - VI)

MARKS: - 100 TIME: 4 HRS

N.B:

1. All questions are compulsory.
2. Figures to the right indicate marks to a sub-question.
3. Use of map stencils and simple calculator is allowed.

Q. 1	Unit-I	16 Marks
Q. 2	Unit-II	16 Marks
Q. 3	Unit-III	16 Marks
Q. 4	Unit-IV	16 Marks
Q. 5	Unit-V	16 Marks
Q. 6	Journal and Viva	20 Marks

SEMESTER –VI

University of Mumbai

Revised Syllabus w.e.f. Academic Year, 2018-19 (CBSGS)

T.Y.B.A. / T.Y.B.Sc. Geography, Semester – VI, Paper: IV

Subject Title: ENVIRONMENTAL GEOGRAPHY

COURSE CODE: _____ Credit: 04

UNIT -I	Introduction to Environmental Geography		No. of Lectures
	1.1	Environmental Geography: Definition, Nature, Scope and Importance	
	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		

	5.1	Concepts and Need of Sustainable Development and Environmental Management	12
	5.2	Eco-friendly Lifestyle and Need of Environmental Education	
	5.3	Biosphere Reserves and Wildlife Management in India	
	5.4	Environmental Impact Assessment	

Reference book:

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

QUESTION PAPER PATTERN:

Time: 3 hours		Marks; 100
N.B. 1. All questions are compulsory and carry equal marks. 2. Use of Map Stencils is permitted. 3. Draw sketches and diagrams wherever necessary.		
Q. 1	Long answer question on Unit-I	20 Marks
OR		
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Q. 2	Long answer question on Unit-II	20 Marks
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OR		
	Long answer question on unit –III for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 4	Long answer question on Unit-IV	20 Marks
OR		
	Long answer question on unit –IV for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 5	Long answer question on Unit-V	20 Marks
OR		
	Long answer question on unit –V for 20 Marks or Two short answer questions each 10 Marks	20 Marks

University of Mumbai
Revised Syllabus w.e.f. Academic Year, 2018-19 (CBSGS)
T.Y.B.A. / T.Y.B.Sc. Geography, Semester – VI
Paper No. – V -A
GEOGRAPHY OF TOURISM and RECREATION

COURSE CODE: _____, 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 Organisation		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	

• **Reference Books**

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, Delhi.
7. Thakur S A (2016) : पर्यटन भूगोल, Konkan Geographer's Publication
8. चारपुरे ,विठ्ठल) २०१०:(पर्यटन भूगोल ,पिंपळापुरेआणिप्रकाशक ,नागपूर.

QUESTION PAPER PATTERN:

Time: 3 hours		Marks; 100
N.B. 1. All questions are compulsory and carry equal marks. 2. Use of Map Stencils is permitted. 3. Draw sketches and diagrams wherever necessary.		
Q. 1	Long answer question on Unit-I	20 Marks
OR		
	Long answer question on unit –I for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 2	Long answer question on Unit-II	20 Marks
OR		
	Long answer question on unit –II for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 3	Long answer question on Unit-III	20 Marks
OR		
	Long answer question on unit –III for 20 Marks or Two short answer questions each 10 Marks	20 Marks
Q. 4	Long answer question on Unit-IV	20 Marks
OR		
	Long answer question on unit –IV for 20 Marks or	20 Marks

	Two short answer questions each 10 Marks	
Q. 5	Long answer question on Unit-V	20 Marks
	OR	
	Long answer question on unit –V for 20 Marks or Two short answer questions each 10 Marks	20 Marks

University of Mumbai

Revised Syllabus w.e.f. Academic Year, 2018-19 (CBSGS)

T.Y.B.A. / T.Y.B.Sc. Geography, Semester –VI, Paper No: VI

**Subject Title: TOOLS AND TECHNIQUES IN GEOGRAPHY FOR
SPATIAL ANALYSIS-II (Practical)**

COURSE CODE: _____, Credit: __03__

Unit -I	Nature of data and central tendency	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	
	2.1. Mean Deviation and Quartile Deviation	09
	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	09
	3.2. Regression analysis	
	3.3. Chi square test	
Unit-IV	Sampling	
	4.1. Sample and sample design in geography	09
	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	09
	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.	
	5.3. Collection of geospatial data – toposheets, aerial photographs, Google images/maps, Bhuvan images etc.	
	To prepare a geographical report of a place with the help of an available 5.1, 5.2, and 5.3 aspects	

References -

- Ahirrao ani Karanjkehele – प्रात्य क्षक भूगोल,
- Karlekar Shrikant- प्रात्य क्षक भूगोल, डायमंड पब्लिकेशन्स
- Karlekar Shrikant- Bhoogol shastratil Sanshodhan Paddhati, डायमंड पब्लिकेशन्स
- Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
- NCERT - Textbook for Class-12, Practical Work in Geography Part II
- Peter A. Rogerson - Statistical Methods for Geography, Sege Publishers -2001
- Robinson A.H. - Elements of Cartography, Wiley
- Sarkar Ashis - Practical Geography, Orient Black Swan – 2015
- Sarkar Ashis –Quantitative Geography, Orient Black Swan – 2013
- Singh R.L. & Singh P. B. - Elements of Practical Geography, Kalyani Publishers 2005
- Stoddard Robert – Field techniques and research methods in geography, Geography faculty publication <http://digitalcommons.unl.edu/geographyfacpub/26>

QUESTION PAPER PATTERN

(SEM - VI)

MARKS: - 100 TIME: 4 HRS

N.B:

4. All questions are compulsory.
5. Figures to the right indicate marks to a sub-question.
6. Use of map stencils and simple calculator is allowed.

Q. 1	Unit-I	16 Marks
Q. 2	Unit-II	16 Marks
Q. 3	Unit-III	16 Marks
Q. 4	Unit-IV	16 Marks
Q. 5	Unit-V	16 Marks
Q. 6	Journal and Viva	20 Marks