

University of Mumbai



क. वि.प्रा.स.से.(युजी)/आयसीसी/२०२४-२५/४

परिपत्रक :-

सर्व प्राचार्य/संचालक, संलग्नित महाविद्यालये/संस्था, विद्यापीठ शैक्षणिक विभागांचे संचालक/विभाग प्रमुख यांना कळविण्यात येते की, राष्ट्रीय शैक्षणिक धोरण २०२० च्या अमलबजावणीच्या अनुषंगाने शैक्षणिक वर्ष २०२४-२५ पासून एक्झिट पर्याय सह पदवी व पदव्युत्तर अभ्यासक्रम विद्यापिठेच्या दिनांक २७ डिसेंबर, २०२३, ३ फेब्रुवारी, २०२४, २० एप्रिल, २०२४ व २४ मे, २०२४ च्या बैठकीमध्ये मंजूर झालेले सर्व अभ्यासक्रम मुंबई विद्यापीठाच्या www.mu.ac.in या संकेत स्थळावर NEP २०२० या टॅब वर उपलब्ध करण्यात आलेले आहेत.

मुंबई - ४०० ०३२

११ जून, २०२४

Baliram

(प्रा. (डॉ.) बळीराम गायकवाड)

प्र. कुलसचिव

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AC – 27/12/2023

Item No. – 8.1 (N)

As Per NEP 2020

University of Mumbai



Title of the program

- A- U.G. Certificate in **Geography**
- B- U.G. Diploma in **Geography**
- C- B.A. (**Geography**)
- D- B.A. (Hons.) in **Geography**
- E- B.A. (Hons. with Research) in **Geography**

Syllabus for

Semester – Sem I & II

Ref: GR dated 20th April, 2023 for Credit Structure of UG

(With effect from the academic year 2024-25
Progressively)

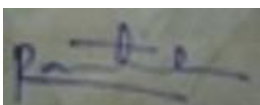
University of Mumbai



(As per NEP 2020)

Sr. No.	Heading	Particulars	
1	Title of program O: <u>IMU-501A</u>	A	U.G. Certificate in Geography
	O: <u>IMU-501B</u>	B	U.G. Diploma in Geography
	O: <u>IMU-501C</u>	C	B.A. (Geography)
	O: <u>IMU-501D</u>	D	B.A. (Hons.) in Geography
	O: <u>IMU-501E</u>	E	B.A. (Hons. with Research) in Geography
2	Eligibility O: <u>IMU-502A</u>	A	HSC equivalent OR Passed Equivalent Academic Level 4.0
	O: <u>IMU-502B</u>	B	Under Graduate Certificate in Geography Academic Level 4.5
	O: <u>IMU-502C</u>	C	Under Graduate Diploma in Geography Academic Level 5.0
	O: <u>IMU-502D</u>	D	Bachelors of Geography with minimum CGPA of 7.5 Academic Level 5.5
	O: <u>IMU-502E</u>	E	Bachelors of Geography with minimum CGPA of 7.5 Academic Level 5.5
3	Duration of program R: Three Years R: <u>IMU-501</u>	A	One Year
		B	Two Years
		C	Three Years
		D	Four Years
		E	Four Years

4	Intake Capacity R: <u>IMU-502</u>	120	
5	Scheme of Examination R: <u>IMU-503</u>	NEP 40% Internal 60% External, Semester End Examination Individual Passing in Internal and External Examination	
6	R: <u>IMU-504</u> Standards of Passing	40%	
7	Credit Structure Sem. I - R: <u>IMU-505A</u> Sem. II -R: <u>IMU-505B</u>	Attached herewith	
	Credit Structure Sem. III - R: <u>IMU-505C</u> Sem. IV - R: <u>IMU-505D</u>		
	Credit Structure Sem. V - R: <u>IMU-505E</u> Sem. VI -R: <u>IMU-505F</u>		
8	Semesters	A	Sem I & II
		B	Sem III & IV
		C	Sem V & VI
		D	Sem VII & VIII
		E	Sem VII & VIII
9	Program Academic Level	A	4.5
		B	5.0
		C	5.5
		D	6.0
		E	6.0
10	Pattern	Semester	
11	Status	New	
12	To be implemented from Academic Year Progressively	From Academic Year: 2024-25	



Sign of the BOS
Chairman
Name of the Chairman
Name of the BOS

Sign of the
Offg. Associate Dean
Name of the Associate Dean
Name of the Faculty

Sign of the
Offg. Dean
Name of the Offg. Dean
Name of the Faculty

Preamble

1) Introduction

The world is changing and so is the need of people. The increased levels of stress, changing global economy and environmental dynamism have made the role of psychologists, economists and geographers very crucial in the process of maintaining the global balance. Therefore, the College offers a Bachelors of Arts degree in the most contemporary subjects of Psychology, Economics and Geography so that the College can create graduates who can cater to the needs of the world and at the same time make them independent by inculcating the knowledge and skills required by their respective industries. The course is designed in such a way that the learners will be able to demonstrate a high level of knowledge, and advanced reading, writing and composition skills and they will apply basic research methods. Finally, the course will help to develop ethical value systems, awareness about gender issues, holistic health and environmental sustainability.

This Bachelor's Degree Programme will provide students the right blend of knowledge and skills along with practical exposure

2) Aims and Objectives

This program of BA is structured to provide graduates with practical skills required in fields like Ethical Value Systems, Health Industry and Environmental Sustainability. The main objectives of BA are:-

- To provide intensive theoretical & practical knowledge
- To provide a high level of knowledge, advanced reading, writing and composition skills and they will apply basic research methods.
- To train students with knowledge in the field of Geography
- To develop students' geographical competencies respectively to become employable or to start their entrepreneurial journey.

3) Learning Outcomes

After completing three years of the Bachelor of Arts (B.A.) program, the learners will:

PO – 1: demonstrate detailed knowledge of the discipline of Geography and be able to pursue higher education in this discipline

PO – 2: be able to have advanced reading, writing, speaking and composition skills in two languages (English and Hindi)

PO – 3: be eligible for employment in diverse areas such as corporate sector, government, Education, tourism and NGOs

PO – 4: be able to understand and apply basic research methods including data analysis and interpretation

PO -5: develop ethical value systems, awareness about gender issues, holistic health and environmental sustainability

PSO- Geography

PSO- 1: Acquiring knowledge of Physical Geography and Human Geography

-PSO- 2: Understanding population, regional disparities, socio-cultural diversities and identifying economic and tourism opportunities

PSO- 3: Handling statistical data and application of GIS and modern Geographical Map Making Techniques

PSO- 4: Creating awareness about the hazards and disasters to which the subcontinent is vulnerable; and their management.

4) Any other point (if any)

5) Credit Structure of the Program (Sem I, II, III, IV, V & VI)

Under Graduate Certificate in Geography Credit Structure (Sem. I & II)

R: _____ A										
Level	Semester	Major		Minor	OE	VSC, SEC (VSEC)	AEC, VEC,IKS	OJT, FP, CEP, CC,RP	Cum. Cr. / Sem.	Degree/ Cum. Cr.
		Mandatory	Electives							
4.5	I	6		-	2+2	VSC:2, SEC:2 VSC: Tools and Techniques of Spatial Analysis in Geography I (2) SEC: Tools and Techniques of Weather Data Analysis (2)	AEC:2, VEC:2,IKS:2	CC:2	22	UG Certificate 44
		1) Introduction to Human Geography (4) 2) Geography of Maharashtra (2)								
	R: _____ B									
	II	6		2	2+2	VSC:2, SEC:2 VSC: Tools and Techniques of Spatial Analysis in Geography II (2) SEC: Tools and Techniques of Thematic Mapping (2)	AEC:2, VEC:2	CC:2	22	
	Cum Cr.	12	-	2	8	4+4	4+4+2	4	44	
Exit option: Award of UG Certificate in Major with 40-44 credits and an additional 4 credits core NSQF course/ Internship OR Continue with Major and Minor										

**Under Graduate Diploma in Geography
Credit Structure (Sem. III & IV)**

R: _____ A											
Level	Semester	Major		Minor	OE	VSC, SEC (VSEC)	AEC, VEC, IKS	OJT, FP, CEP, CC,RP	Cum. Cr. / Sem.	Degree/ Cum. Cr.	
		Mandatory	Electives								
5.0	III	8 7) Geography of Rural Settlement (2) 8) Agricultural Geography (2) 9) Social Geography (2) 10) Tools and Techniques of Spatial Analysis in Geography III (2)			2	3) Tourism Survey and Planning (2) (No SEC in Sem 3)		FP:2	22	UG Certificate 44	
	R: _____ B										
	IV	8 11) Geography of Urban Settlement (2) 12) Industrial Geography (2) 13) Environmenta l Geography (2) 14) Tools and Techniques of Spatial Analysis in Geography IV (2)		4	2	SEC:2 3) Techniques of Topographical Maps Interpretation (2) (No VSC in Sem IV)		CEP: 2	22		
	Cum Cr.	28		10	12	6+6	8+4+2	8	88		

Exit option: Award of UG Certificate in Major with 40-44 credits and an additional 4 credits core NSQF course/ Internship OR Continue with Major and Minor

B.A. (Geography)

Credit Structure (Sem. V & VI)

R: _____ A										
Level	Semester	Major		Minor	OE	VSC, SEC (VSEC)	AEC, VEC, IKS	OJT, FP, CEP, CC,RP	Cum. Cr. / Sem.	Degree/ Cum. Cr.
		Mandatory	Electives							
5.5	V	10 15) Introduction to Geomorphology (2) 16) Political Geography (2) 17) Introduction to Remote Sensing Technology (2) 18) Geography of Transport 18) Field Techniques in Geography (2) 19) Remote Sensing Technology (2)	4 1) Applications of Remote Sensing Technology (2) 2) Research Methodology in Geography (2)	4		VSC: 2		FP/CEP: 2	22	UG Degree 132
	VI	10 20) Introduction to Climatology (2) 21) Introduction to Oceanography (2) 22) Geography of Trade & Marketing (2) 23) Introduction to GIS and GPS (2) 24) Statistical Techniques in Geography (2)	4 3) Applications of GIS and GPS (2) 4) An Introduction to Digital Cartography	4 (2)		SEC: 2		OJT:4		
	Cum Cr.	48	8	18	12	8+6	8+4+2	8+6+4	132	
<p align="center">Exit option: Award of UG Certificate in Major with 40-44 credits and an additional 4 credits core NSQF course/ Internship OR Continue with Major and Minor</p>										

Semester – I
Syllabus – GEOGRAPHY

University of Mumbai

As per NEP 2020

Major Theory I (Mandatory) Semester I F.Y.B.A. / B.Sc. Geography (From academic Year 2024-2025)

Title: - INTRODUCTION TO HUMAN GEOGRAPHY

Course Credits: 04

Course Code:

Pre-requisites:

Basic knowledge and understanding of World Geography

Course Objectives:

1. To understand the basics of Human Geography as a branch of Geography
2. To know the nature of the human-environment relationship historically and philosophically
3. To comprehend the adaptive and interfering nature of human interaction with the environment
4. To know the trends of world population growth and patterns of its distribution
5. To understand the factors affecting population distribution
6. To study the concept, types, causes, and consequences of migration
7. To learn the concept of settlement and its site and situation
8. To understand the types and patterns of rural and urban settlements

Course Outcomes:

On successful completion of this course, students will be able to:

1. Describe the meaning, nature, scope, and branches of human geography
2. Develop an understanding of various approaches to human geography
3. Interpret the nature of the human-environment relationship
4. Analyse the growth trends and distribution patterns of the world population and the factors affecting them
5. Recognize different types of migrations
6. Interpret the causes and consequences of migration with suitable examples
7. Distinguish between rural and urban settlements
8. Describe types and patterns of settlements

Course Content:

Unit	Topics	Hours
I	Introduction to Human Geography	14
1.1	Meaning and Nature of Geography	
1.2	Human Geography: Meaning, Nature, and Scope	
1.3	Approaches to Human Geography	
1.4	Branches of Human Geography	
II	Human-Environment Relationship	16
2.1	Changing Human-Environment Relationships: A Historical Perspective	
2.2	Thoughts on Human-Environment Relationship: Determinism, Possibilism, and Probabilism	
2.3	Human Adaptation to Environment: Case Study of Tropical Rainforests and Hot Deserts	
2.4	Human Interference in the Environment and Resultant Environmental Issues	
III	Population and Migration	14

3.1	World Population Growth and Patterns of Distribution	
3.2	Factors Affecting World Population Distribution	
3.3	Concepts and Types of Migration	
3.4	Causes and Consequences of Migration in the Contemporary World Examples	
IV	Human Settlements	
4.1	Meaning of Settlement and Concepts of Rural and Urban Settlements	
4.2	Site and Situation of Settlements	16
4.3	Types and Patterns of Rural Settlements	
4.4	Classification of Urban Settlements	
		60

References:

1. Chandana, R. *Geography of Population: Concepts, Determinants, and Patterns*. Ludhiana: Kalyani Publishers. 2016.
2. Dikshit, R. *Geographical Thought: A Contextual History of Ideas*. Delhi: PHL Learning Pvt. Ltd. 2018.
3. Gautam, A. *Environmental Geography*. Allahabad: Sharda Pustak Bhawan. 2010.
4. Goh Cheng Leong. *Certificate Physical and Human Geography*. New Delhi: Oxford University Press. 2016.
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14. Waugh, D. *The New Wider World*. Oxford: Oxford University Press. 2009.
15. धारपुरे, वि.मानी भूगोल.२०१७.वर्षिपळापुरे अँड क्पनी पब्लिशर्स :नागपूर .
16. ठाकूर वश., रा. पाटील आवि इतर .मानी भूगोल कोकि विऑग्राविकल अर्ोवर्षन ऑ :किकिली .
.२०१६ .इवडया
17. ठाकूर वश., रा. पाटील आवि इतर .िस्ती भूगोल कोकि विऑग्राविकल अर्ोवर्षन ऑ :किकिली .
.२०१६ .इवडया
18. भागित, अ.कालेकर .आवि श्री .मानी भूगोल .२००९ .डायमिंड पब्लिकेशन्स :पुिे .

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As per NEP 2020

Major Theory II (Mandatory) Semester I F.Y.B.A. / B.Sc. Geography (From academic Year 2024-2025)

Title: - GEOGRAPHY OF MAHARASHTRA

Course Credits: 02

Course Code:

Pre-requisites:

Basic high school-level knowledge and understanding of Indian geography

Course Objectives:

1. To understand the location and extent of Maharashtra and its significance
2. To comprehend the physiographic divisions, rivers, and climatic characteristics of Maharashtra
3. To study the geographical distribution of soil, natural vegetation, and minerals and their conservation in Maharashtra
4. To learn the growth trends and distribution of the population of Maharashtra
5. To study the distribution of crops, livestock, and fisheries in Maharashtra
6. To learn about types of industries and industrial regions in Maharashtra
7. To study patterns of transport networks and tourism attractions in Maharashtra

Course Outcomes:

On successful completion of this course, students will be able to:

1. Describe the significance of Maharashtra's location and extent
2. Develop an understanding of physiographic divisions, major rivers, and climatic features of Maharashtra
3. Interpret the patterns of distribution of soil, natural vegetation, and minerals in Maharashtra
4. Describe the methods of conservation of soil, natural vegetation, and minerals
5. Interpret the trends of population growth and patterns of distribution of population in Maharashtra
5. Analyse the distribution patterns of crops, livestock, and fisheries in Maharashtra
6. Describe types of industries and industrial regions in Maharashtra
7. Interpret the patterns of transport networks in Maharashtra
8. Recognize tourist attractions in Maharashtra

Course Content:

Unit	Topics	Hours
I	Physical Geography of Maharashtra – I	7
1.1	Location, Extent, and Significance	
1.2	Physiography and Rivers	
1.3	Characteristics of Climate	
II	Physical Geography of Maharashtra – II	8
2.1	Types and Distribution of Soil	
2.2	Types and Distribution of Natural Vegetation	
2.3	Conservation of Soils and, Natural Vegetation	
III	Human Geography of Maharashtra – I	7
3.1	Growth and Distribution of Population	
3.2	Types of Agriculture	
3.3	Types and Distribution of Fisheries	
IV	Human Geography of Maharashtra – II	

4.1	Industrial Regions	8
4.2	Patterns of Transport Network – Road and Water	
4.3	Patterns of Transport Network – Railway and Air	
		30

References:

1. Amrute, V. (2008): 'मुलािंचा वचत्रमय महाराष्ट्र (Children's Atlas of Maharashtra)', Manan Prakashan, Mumbai
2. Deshpande, C. D. (1948): 'Western India: A Regional Interpretation', Students Own Book Depot, Dharwar
3. Deshpande, C. D. (1971): 'Geography of Maharashtra', National Book Trust, New Delhi
4. Diddee, J., Jog, S. (2002): 'Geography of Maharashtra', Rawat Publications, Jaipur
5. Dikhsit, K. R. (1986): 'Maharashtra in Maps', Maharashtra State Board for Literature and Culture, Bombay
6. Jethe, A, Thakare, L and others (2020): 'Geography of Maharashtra (Physical)', Nirali Prakashan, Pune
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11. Savadi, A. B. (2020): 'महाराष्ट्र ाचा प्रगत ॲटलर्', (Marathi Edition), Nirali Prakashan, Pune
12. Savadi, A. B. (2022): 'महाराष्ट्र ाचा भूगोल', (Marathi Edition), Nirali Prakashan, Pune

University of Mumbai

As per NEP 2020

Vocational Skill Course (VSC)

F.Y.B.A. / B.Sc. Geography (From academic Year 2024-2025)

SEMESTER- I

Title: - TOOLS AND TECHNIQUES OF SPATIAL ANALYSIS – I (Practical)

Course Credits: 02

Course Code:

Pre-requisite:

Students are aware of the use of maps in day-to-day life.

Course Objectives:

Learners will be able to:

1. Acknowledge the importance and use of maps.
1. Understand and prepare different kinds of maps.
2. Recognize basic themes of map-making.
3. Development of observation and reading skills.

Course Outcomes:

After completion of this course the learner will be able to:

1. Recognize the importance and use of maps in day-to-day life.
2. Develop skills to prepare different kinds of maps.
3. Reevaluate the uses of multiple techniques for multiple themes of map-making.
4. Develop the observation, compilation, analysis and reading skills.

Course Content:

Unit	Topics	Hours
I	Introduction to Maps	07
1.1	Meaning and Elements of Map	
1.2	Types of Maps	
1.3	Calculation of Distance	
II	Map Basics	07
2.1	Direction and Bearing	
2.2	Map projections: Concept and Importance	
2.3	Classification of Projections	
III	Map Scale	08
3.1	Scale: Definition and Importance	
3.2	Types of Scale	
3.3	Conversion of Scale	
IV	Contours	08
4.1	Meaning and Types of Contours	
4.2	Cross Section of Contours	
4.3	Intervisibility	
		30

References:

1. Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
2. Peter A. Rogerson - Statistical Methods for Geography, Sege Publishers -2001

3. Robinson, A.H. and Sale, R. D.: Elements of Cartography. John Wiley and Sons, Inc, New York 1969
4. Henry McCormick - Practical Work in Geography: For the Use of Teachers and Advanced Pupils – Legare Street Press, 2018
5. NCERT - Practical Work in Geography Part - 1 Textbook for Class - 11
6. NCERT - Practical Work in Geography Part - 2 Textbook for Class - 12
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University of Mumbai

As per NEP 2020

Skill Enhancement Course (SEC)

F.Y.B.A. / B.Sc. Geography (From Academic Year 2024-2025)

SEMESTER- I

Title: - Tools and Techniques of Weather Data Collection & Analysis (Practical)

Course Credits: 02

Course Code:

Pre-requisites:

Basic knowledge and understanding of weather and climate

Course Objectives:

1. Equip students with a foundational understanding of weather elements and proficiency in using basic data collection tools.
2. Provide students with insights into the geographical implications of weather and skills in mapping and interpreting weather data to identify significant patterns and events.

Course Outcomes:

After the completion of the Course, the students will be able to:

1. Remember the fundamentals of weather and climate.
2. Understand the conceptual framework of weather and climate.
3. Apply graphical techniques for weather data analysis.
4. Analyse local weather data.

Course Content:

Unit	Topics	Hours
I	Weather and Climate – I	07
1.1	Concept of Weather and Climate	
1.2	Temperature, Humidity and Precipitation: Concept and Types	
1.3	Temperature, Humidity and Precipitation: Factors Affecting	
II	Weather and Climate – II	07
2.1	Concept of Atmospheric Pressure	
2.2	Factors Affecting Atmospheric Pressure	
2.3	Concept and Types of Winds	
III	Weather Data Collection & Analysis	08
3.1	Weather Instruments	
3.2	Use of Websites and Mobile Applications for Temperature, Humidity and Precipitation Data Collection	
3.3	Graphical Representation of Temperature, Humidity and Precipitation Data	
IV	IMD Weather Maps	08
4.1	Introduction to Weather Maps	
4.2	Signs and Symbols of Weather Maps	
4.3	Reading of Weather Maps	

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Semester – II
Syllabus – GEOGRAPHY

University of Mumbai

As per NEP 2020

Major Theory III (Mandatory) Semester II F.Y.B.A. / B.Sc. Geography (From academic Year 2024-2025)

Title: - POPULATION GEOGRAPHY

Course Credits: 04

Course Code:

Pre-requisite:

Knowledge and understanding of basic concepts of the human race, gender and mobility.

Course Objectives:

1. To understand the concept and evolution of Population Geography
2. To analyse the aspect of population growth, distribution and density
3. To explain the causes, effects and types of migration
4. To conceptualize the problems related to the population of India

Course Outcomes:

1. Learners will be able to understand the concept and evolution of Population Geography
2. Learners will be able to analyse the aspects of population growth, distribution and density
3. Learners will be able to explain the causes, effects and types of migration
4. Learners will be able to conceptualize the problems related to the population of India

Course Content:

Unit	Topics	Hours
I	Unit I: Population Geography	14
1.1	Concept and Definition of Population Geography	
1.2	Nature, Scope and Importance of Population Geography	
1.3	Historical Development of Population Geography	
1.4	Relationship between Population Geography and other Social Sciences	
II	Unit II: Growth, Distribution and Density	16
2.1	Causes and Effects of Population Growth	
2.2	Factors Affecting the Distribution of Population	
2.3	Demographic Transition Theory	
2.4	Population Density Zones in the World	
III	Unit III: Migration	14
3.1	Definition and Types of Migration	
3.2	Causes and Effects of Migration	
3.3	Recent Trends of Migration of Population	
3.4	Recent Trends of International Migration of Population	
IV	Unit IV: Population of India	16
4.1	Growth and Distribution of Population in India	
4.2	Demographic characteristics	
4.3	Population explosion and related issues in India	
4.4	Population Policy of India	
		60

References:

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University of Mumbai

As per NEP 2020 Major Theory IV (Mandatory) Semester II F.Y.B.A. / B.Sc. Geography (From academic Year 2024-2025)

Title: - GEOGRAPHY OF INDIA

Course Credits: 02

Course Code:

Pre-requisite:

Knowledge and understanding of basic concepts of India's Physiography and human activities

Course Objectives:

1. To identify the location and administrative environment of India
2. To explain the distribution of soil, minerals and vegetation in India
3. To understand the types and distribution of agriculture, livestock and fishing in India
4. To analyse the importance, distribution and development of resources in India

Course Outcomes:

1. Learners will be able to identify the location and administrative environment of India
2. Learners will be able to explain the distribution of soil, minerals and vegetation in India
3. Learners will be able to understand the types and distribution of agriculture, livestock and fishing in India
4. Learners will be able to analyse the importance, distribution and development of resources in India

Course Content:

Unit	Topics	Hours
I	Physical Geography of India – I	7
1.1	Location, Extent, and Significance	
1.2	Physiography and Rivers	
1.3	Characteristics of Climate	
II	Physical Geography of India – II	8
2.1	Types and Distribution of Soil	
2.2	Types and Distribution of Natural Vegetation	
2.3	Conservation of Soils and, Natural Vegetation	
III	Human Geography of India – I	7
3.1	Growth and Distribution of Population	
3.2	Types of Agriculture	
3.3	Types and Distribution of Fisheries	
IV	Human Geography of India – II	8
4.1	Industrial Regions	
4.2	Patterns of Transport Network – Road and Water	
4.3	Patterns of Transport Network – Railway and Air	
		30

References:

1. Deshpande C.D. (1992): India: A Regional Interpretation, Northern Book Centre, New Delhi.
2. Bharucha, F.R. (1983): A textbook of the plant geography of India, Oxford University Press, Bombay.

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University of Mumbai

As per NEP 2020

Vocational Skill Course (VSC)

F.Y.B.A. / B.Sc. Geography (From academic Year 2024-2025)

SEMESTER- II

Title: - TOOLS AND TECHNIQUES OF SPATIAL ANALYSIS – II (Practical)

Course Credits: 02

Course Code:

Pre-requisite:

Students are aware of the use of data and information in day-to-day life.

Course Objectives:

Learners will be able to:

1. Acknowledge the importance and use of data.
2. Understand and compile the different types of data.
3. Use of data collection, representation and interpretation of different data.
4. Develop the observation, demonstration, compilation and representation skills.

Course Outcomes:

After completion of this course the learner will be able to:

1. Recognize the importance and use of data in day-to-day life.
2. Develop skills in data collection, representation and interpretation.
3. Reevaluate the uses of multiple techniques for data presentation in decision-making.
4. Develop the observation, compilation, analysis and reading skills.

Course Content:

Unit	Topics	Hours
I	Geographical Data: Types and Collection	07
1.1	Meaning and Types of Geographic Data	
1.2	Sources of Data	
1.3	Methods of Primary Data Collection: Questionnaire	
II	Data Processing	07
2.1	Data processing: Classification and Tabulation	
2.2	Frequency Distribution: Frequency Tally, Histogram	
2.3	Frequency Polygon and Ogive Curve	
III	Techniques of Data Representation	08
3.1	Simple Line graph, Multiple Line graph	
3.2	Simple bar graph, Multiple bar graph	
3.3	Proportionate circles, Divided Circles	
IV	Techniques of Data Representation	08
4.1	Band Graph	
4.2	Divided Bar Graph	
4.3	Proportionate Squares	
		30

References:

1. Monkhouse F.J. - Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised).
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8. Singh L. R. - Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad, 2010
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10. Sarkar Ashish - Practical Geography, Orient Black Swan – 2015
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University of Mumbai

As per NEP 2020

Skill Enhancement Course (SEC)

F.Y.B.A. / B.Sc. Geography (From academic Year 2024-2025)

SEMESTER- II

Title: - Tools and Techniques of Thematic Mapping (Practical)

Course Credits: 02

Course Code:

Pre-requisite:

Knowledge and understanding of basic concepts of maps

Course Objectives:

1. To train the learners concerning the Cartographic Principles.
2. To provide a foundation for thematic map design and spatial analysis techniques.
3. To interpret and communicate spatial and non-spatial data.

Course Outcomes:

After the completion of the course, the students will be able to:

1. Remember the fundamentals of Maps and Thematic Maps.
2. Understand the elements of maps.
3. Apply Spatial Statistical Techniques in Thematic Mapping
4. Analyse the different types of thematic maps.
5. Evaluate the infographics provided through thematic maps.
6. Create his/her thematic map using spatial-statistical techniques.

Course Content:

Unit	Topics	Hours
I	Introduction to Thematic Maps	07
1.1	Map: Meaning and Types	
1.2	Basic Elements of Maps	
1.3	Concept and Types of Thematic Maps	
II	Reading and Interpretation of Thematic Maps – I	08
2.1	Choropleth Map	
2.2	Isopleth Map	
2.3	Dot Map	
III	Reading and Interpretation of Thematic Maps – II	07
3.1	Located Bars, Located Proportional Circles,	
3.2	Pictogram	
3.3	Flow Maps	
IV	Techniques & Themes of Thematic Maps – III	08
4.1	Population Maps	
4.2	Linguistic Maps	
4.3	Land Use Land Cover (LULC) Maps	
		30

References:

1. Slocum, Terry A., 1999, Thematic Cartography and Visualization, Prentice-Hall, Upper Saddle Creek, NJ. www.prenhall.com/slocum
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QUESTION PAPER PATTERN (Geography)

(External and Internal)

EXAMINATION PATTERN FOR THEORY PAPER (SEMESTER I and II)

<u>A) Continuous Internal Assessment (40 Marks)</u>		
Sr. No.	Particular	Marks
1	One Assignment/Project work/Case study /Presentation /Seminar /Field visit report/Book review etc. to be conducted in the given semester before the Semester end examination.	20
2	One online/ offline class test	10
3	Active participation in regular class instructional deliveries and fieldwork.	05
4	Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities	05
B) Semester End Examination (60 Marks):		
1. These examinations shall be of 2 Hours duration. Maximum marks 60.		
2. There shall be four questions each of 15 marks. On each unit, there will be one question as per the directive of BOS.		
3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)		

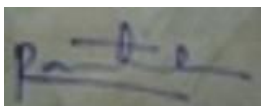
EXAMINATION PATTERN FOR PRACTICAL PAPER (SEMESTER I and II)

<u>A) Continuous Internal Assessment (40 Marks)</u>		
Sr.No.	Particular	Marks
1	Journal and Viva	20
2	One online/ offline class test	10
3	Active participation in regular class instructional deliveries and fieldwork.	05
4	Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities	05
B) Semester End Examination (60 Marks):		

1. These examinations shall be of 2 Hours duration. Maximum marks 60.
2. There shall be four questions each of 15 marks. On each unit, there will be one question as per the directive of BOS.
3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)

Letter Grades and Grade Points:

Semester GPA/ Programme CGPA Semester/ Programme	% of Marks	Alpha-Sign/ Letter Grade Result	Grading Point
9.00 - 10.00	90.0 - 100	O (Outstanding)	10
8.00 - < 9.00	80.0 - < 90.0	A+ (Excellent)	9
7.00 - < 8.00	70.0 - < 80.0	A (Very Good)	8
6.00 - < 7.00	60.0 - < 70.0	B+ (Good)	7
5.50 - < 6.00	55.0 - < 60.0	B (Above Average)	6
5.00 - < 5.50	50.0 - < 55.0	C (Average)	5
4.00 - < 5.00	40.0 - < 50.0	P (Pass)	4
Below 4.00	Below 40.0	F (Fail)	0
Ab (Absent)	-	Ab (Absent)	0



**Sign of the BOS
Chairman**
Name of the Chairman
Name of the BOS

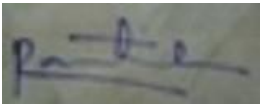
**Sign of the
Offg. Associate Dean**
Name of the Associate Dean
Name of the Faculty

**Sign of the
Offg. Dean**
Name of the Offg. Dean
Name of the Faculty

Justification for B.A. (Geography)

1.	Necessity for starting the course:	<p>The world is changing and so is the need of people. The increased levels of stress, changing global economy and environmental dynamism have made the role of geographers very crucial in the process of maintaining the global balance. Therefore, the College offers a Bachelor of Arts degree in the most contemporary subject of Geography so that the College can create graduates who can cater to the needs of the world and at the same time make them independent by inculcating the knowledge and skills required by their respective industries. The course is designed in such a way that the learners will be able to demonstrate a high level of knowledge, and advanced reading, writing and composition skills and they will apply basic research methods. Finally, the course will help to develop ethical value systems, awareness about gender issues, holistic health and environmental sustainability. This Bachelor's Degree Programme will provide students the right blend of knowledge and skills along with practical exposure</p>
2.	Whether the UGC has recommended the course:	Yes
3.	Whether all the courses have commenced from the academic year 2023-24	Yes
4.	The courses started by the University are self-financed, whether an adequate number of eligible permanent faculties are available?:	Yes
5.	To give details regarding the duration of the Course and is it possible to compress the course?:	3 year course No

6.	The intake capacity of each course and no. of admissions given in the current academic year:	Intake Capacity – 120
7.	Opportunities of Employability / Employment available after undertaking these courses:	It prepares individuals for advanced positions in geography, urban planning, and GIS, statistical analysis, research and training, education; careers in environmental consultancy, sustainability, and policy development; fosters innovative business opportunities in eco-friendly products, green technology, and conservation services. ventures in mining, renewable energy, farming, and biotech industries



**Sign of the BOS
Chairman**
Name of the Chairman
Name of the BOS

**Sign of the
Offg. Associate Dean**
Name of the Associate Dean
Name of the Faculty

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Offg. Dean**
Name of the Offg. Dean
Name of the Faculty