University of Mumbai

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ईमेल - आयडी - dr.aams@fort.mu.ac.in
aams3@mu.ac.in

विद्याविषयक प्राधिकरणे
सभा आणि सेवा विभाग(ए.ए.एम.एस)
रूम नं. १२८ एम.जी.रोड, फोर्ट,
मुंबई – ४०० ०३२
टेलिफोन नं. – ०२२ – ६८३२००३३

(नॅक पुनर्मूल्यांकनाद्वारे ३.६५ (सी.जी.पी.ए.) सह अ++ श्रेणी
विद्यापीठ अनुदान आयोगाद्वारे श्रेणी १ विद्यापीठ दर्जा)

क्र.वि.प्रा.स.से./आयसीडी/२०२५-२६/३७ दिनांक : २७ मे, २०२५

परिपत्रक:-

सर्व प्राचार्य/संचालक, संलग्नित महाविद्यालये/संस्था, विद्यापीठ शैक्षणिक विभागांचे संचालक/ विभाग प्रमुख यांना कळविण्यात येते की, राष्ट्रीय शैक्षणिक धोरण २०२० च्या अमंलबजावणीच्या अनुषंगाने **शैक्षणिक वर्ष २०२५-२६** पासून **पदवी व पदव्युत्तर अभ्यासक्रम** विद्यापरिषदेच्या दिनांक २८ मार्च २०२५ व २० मे, २०२५ 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
२७ मे, २०२५

(डॉ. प्रसाद कारंडे)
कुलसचिव

Copy forwarded for information and necessary action to :-	
1	The Deputy Registrar, (Admissions, Enrolment, Eligibility and Migration Dept)(AEM), dr@eligi.mu.ac.in
2	The Deputy Registrar, Result unit, Vidyanagari drresults@exam.mu.ac.in
3	The Deputy Registrar, Marks and Certificate Unit,. Vidyanagari dr.verification@mu.ac.in
4	The Deputy Registrar, Appointment Unit, Vidyanagari dr.appointment@exam.mu.ac.in
5	The Deputy Registrar, CAP Unit, Vidyanagari cap.exam@mu.ac.in
6	The Deputy Registrar, College Affiliations & Development Department (CAD), deputyregistrar.uni@gmail.com
7	The Deputy Registrar, PRO, Fort, (Publication Section), Pro@mu.ac.in
8	The Deputy Registrar, Executive Authorities Section (EA) eau120@fort.mu.ac.in He is requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to the above circular.
9	The Deputy Registrar, Research Administration & Promotion Cell (RAPC), rapc@mu.ac.in
10	The Deputy Registrar, Academic Appointments & Quality Assurance (AAQA) dy.registrar.tau.fort.mu.ac.in ar.tau@fort.mu.ac.in
11	The Deputy Registrar, College Teachers Approval Unit (CTA), concolsection@gmail.com
12	The Deputy Registrars, Finance & Accounts Section, fort draccounts@fort.mu.ac.in
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14	The Assistant Registrar, Administrative Sub-Campus Thane, thanesubcampus@mu.ac.in
15	The Assistant Registrar, School of Engg. & Applied Sciences, Kalyan, ar.seask@mu.ac.in
16	The Assistant Registrar, Ratnagiri Sub-centre, Ratnagiri, ratnagirisubcentar@gmail.com
17	The Director, Centre for Distance and Online Education (CDOE), Vidyanagari, director@idol.mu.ac.in
18	Director, Innovation, Incubation and Linkages, Dr. Sachin Laddha pinkumanno@gmail.com
19	Director, Department of Lifelong Learning and Extension (DLLE), dlleuniversityofmumbai@gmail.com

Copy for information :-	
1	P.A to Hon'ble Vice-Chancellor, vice-chancellor@mu.ac.in
2	P.A to Pro-Vice-Chancellor pvc@fort.mu.ac.in
3	P.A to Registrar, registrar@fort.mu.ac.in
4	P.A to all Deans of all Faculties
5	P.A to Finance & Account Officers, (F & A.O), camu@accounts.mu.ac.in

To,

1	The Chairman, Board of Deans pvc@fort.mu.ac.in
2	**Faculty of Humanities,** **Offg. Dean** 1. Prof.Anil Singh Dranilsingh129@gmail.com **Offg. Associate Dean** 2. Prof.Manisha Karne mkarne@economics.mu.ac.in 3. Dr.Suchitra Naik Naiksuchitra27@gmail.com
	Faculty of Commerce & Management, **Offg. Dean,** 1 Prin.Ravindra Bambardekar principal@model-college.edu.in **Offg. Associate Dean** 2. Dr.Kavita Laghate kavitalaghate@jbims.mu.ac.in 3. Dr.Ravikant Balkrishna Sangurde Ravikant.s.@somaiya.edu 4. Prin.Kishori Bhagat kishoribhagat@rediffmail.com

	Faculty of Science & Technology **Offg. Dean** 1. Prof. Shivram Garje ssgarje@chem.mu.ac.in **Offg. Associate Dean** 2. Dr. Madhav R. Rajwade Madhavr64@gmail.com 3. Prin. Deven Shah sir.deven@gmail.com
	Faculty of Inter-Disciplinary Studies, **Offg. Dean** 1.Dr. Anil K. Singh aksingh@trcl.org.in **Offg. Associate Dean** 2.Prin.Chadrashekhar Ashok Chakradeo cachakradeo@gmail.com 3. Dr. Kunal Ingle drkunalingle@gmail.com
3	Chairman, Board of Studies,
4	The Director, Board of Examinations and Evaluation, dboee@exam.mu.ac.in
5	The Director, Board of Students Development, dsd@mu.ac.in DSW direcotr@dsw.mu.ac.in
6	The Director, Department of Information & Communication Technology, director.dict@mu.ac.in

AC – 20/05/2025
Item No. – 8.1 (N)

As Per NEP 2020

University of Mumbai

Syllabus for Major Vertical – 1 & 4		
Name of the Programme – B.A./B.Sc. (GEOGRAPHY)		
Faulty of Inter-Disciplinary Studies		
Board of Studies in Geography		
U.G. Second Year Programme	**Exit Degree**	**U.G. Diploma in Geography**
Semester		**III & IV**
From the Academic Year		**2025-26**

University of Mumbai

(As per NEP 2020)

Sr. No.	Heading	Particulars
1	**Title of program** **O:_____**	**B.A. (Geography)**
2	**Exit Degree**	**U.G. Diploma in Geography**
3	**Scheme of Examination** **R: _____**	NEP 40% Internal 60% External, Semester End Examination Individual Passing in Internal and External Examination
4	**Standards of Passing** **R: _____**	**40%**
5	**Credit Structure** **R. IMU-505C** **R. IMU-505D**	**Attached herewith**
6	**Semesters**	**Sem. III & IV**
7	**Program Academic Level**	**5.00**
8	**Pattern**	**Semester**
9	**Status**	**New**
10	**To be implemented from the Academic Year**	**2025-26**

Sd/-	**Sd/-**	**Sd/-**	**Sd/-**
Sign of the BOS Chairman **Dr. Rajaram B. Patil** **Board of Studies in Geography**	**Sign of the Offg. Associate Dean** **Dr. C.A.Chakradeo** **Faculty of Interdisciplinary Studies**	**Sign of the Offg. Associate Dean** **Dr. Kunal Ingle** **Faculty of Interdisciplinary Studies**	**Sign of the Offg. Dean** **Prof. A. K. Singh** **Faculty of Interdisciplinary Studies**

Under Graduate Diploma in Geography

Credit Structure (Sem. III & IV)

	R. IMU-505C								
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 1) Geography of Rural Settlements (4) 2) Agricultural Geography (4) 3) Social Geography (2)		4	2	VSC:2 VSC: Tools and Techniques of Spatial Analysis in Geography III (2) VSC: Tourism Survey and Planning (4) SEC: Surveying Skills in Human Geography (2)	AEC:2	FP: 2 CC:2	22	**UG Diploma 88**
	R. IMU-505D									
	IV	8 1) Geography of Urban Settlements (4) 2) Industrial Geography (4) 3) Environmental Geography (2)		(4)	2	SEC:2 VSC: Tools and Techniques of Spatial Analysis in Geography IV (2) SEC: Techniques of Topographical Map Interpretation (2)	AEC:2	CEP: 2 CC:2	22	
	Cum Cr.	28		10	12	6+6	8+4+2	8+4	88	
Exit option; Award of UG Diploma in Major and Minor with 80-88 credits and an additional 4 credits core NSQF course/ Internship OR Continuewith Major and Minor										

[Abbreviation - OE – Open Electives, VSC – Vocation Skill Course, SEC – Skill Enhancement Course, (VSEC), AEC – Ability Enhancement Course, VEC – Value Education Course, IKS – Indian Knowledge System, OJT – on Job Training, FP – Field Project, CEP –Community Engajment project , CC – Co-Curricular, RP – Research Project]

Semester - III

Vertical – 1
Major

Syllabus
B.A. (Geography)
(Sem.- III)

Title of Paper: Geography of Rural Settlements

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Geography of Rural Settlements" offered in Semester III of the SYBA Major Geography programme is designed to give students a thorough understanding of rural settlement geography, an important and emerging field in both academic and applied disciplines. This course opens the door to learning about the most basic and oldest form of human settlement—villages—where the majority of India's population still lives. Rural settlements are not just clusters of houses but reflect the deep-rooted social, economic, and cultural lives of people. This course aims to study how and why rural settlements have evolved over time, how they are distributed across the physical landscape, and how they reflect human interaction with the environment. This course is especially useful for students aiming to work in rural development, planning, GIS and remote sensing, Panchayati raj institutions, NGOs, and various government departments like rural housing, land records, or agricultural planning. It builds a strong base for those preparing for competitive exams like UPSC, MPSC, and other public service commissions. The skills developed through this course such as analytical thinking, map interpretation, and understanding of socio-economic factors are directly applicable to many jobs related to geography, planning, and development. Moreover, with the increasing focus on sustainable rural development, this course opens up opportunities in research, consultancy, and policy-making. The subject remains highly interesting for students as it connects theoretical knowledge with practical, everyday realities of rural India, encouraging them to take part in shaping the future of these foundational communities.
2	**Vertical :**	Major
3	**Type :**	Theory
4	**Credit**:	4 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	60 Hours
6	**Marks Allotted**:	100 Marks

7	**Course Objectives**: (List some of the course objectives) 1. To understand the nature, Scope, importance and evolution of Rural settlements 2. To understand and explain the various types of Rural settlements 3. To understand the settlement pattern and impact of Physical, Economic, Cultural and Social factors on Rural Settlements 4. To understand and explain the house types and variations of settlements in India
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Understand the importance, nature, scope and evolution of the Geography of Rural Settlement 2. Explain the types of rural settlements according to location, spacing, function and pattern. 3. Understand and explain the Factors and Patterns of Rural Settlements. 4. Explain and evaluate the distribution, density, house types and variations in rural settlement patterns and morphology in India.
9	**Modules**:- Per credit One module can be created
	Module 1: Introduction to Rural Settlements (15 Lectures)
	1.1 Definition, Nature and Scope of Geography of Rural Settlement 1.2 Importance of the Study of Rural Settlements 1.3 Evolution and Growth of Rural Settlements 1.4 Characteristics of Rural Settlements
	Module 2: Types of Rural Settlements (15 Lectures)
	2.1 Based on Location: Dry-point and Wet Point/ Physical and Cultural location 2.2 Based on Spacing: Compact, Scattered, Fragmented, Composite 2.3 Based on Function: Agriculture, Fishing, Lumbering, Mining 2.4 Based on Pattern: Linear, Circular, Square, Rectangular, Radial, Terrace
	Module 3: **Factors and Patterns of Rural Settlements (15 Lectures)**
	3.1 Physical and Economic Factors 3.2 Social, Cultural and Political Factors 3.3 Hierarchy of Rural Settlements 3.4 Settlement Pattern in Old and New World
	Module 4: **House Types and Regional Variation in India (15 Lectures)**
	4.1 Distribution and Density of Rural Settlements in India 4.2 House Types and Building Materials 4.3 Regional Variation in Rural Settlement Patterns in India 4.4 Rural Development Policies in India
10	**Text Books:** 1. Thakur S. A. and others – "Settlement Geography"/ *Vasti Bhugol*- Konkan Geographers, Publication (2016) 2. Leong, Goh-Cheng and Morgan, G. (1994): "Human and Economic Geography", Oxford University Press, Oxford 3. घारपुरे विठ्ठल (१९९९) वस्ती भूगोल, पिंपळापुरे अँड कं.,नागपूर 4. परमार राजेंद्र, निलेश वानखडे व इतर (२०२२)मानवी भूगोल, हिमालया पब्लीशिंग हाउस, मुंबई

<table>
<tr><td>11</td><td colspan="2">Reference Books:
1. Deshpande, C. D. (2005): “Cities: A Geographical Study”, Translated by V. G. Amrite, Manan Prakashan, Mumbai
2. Ghosh. S. (2015): “Introduction to Settlement Geography”, Orient Blackswan Private Limited, Hyderabad
3. Jyptirmoy Sen (2007): A Text Book of Social and Cultural Geography, Kalyani Publishers, New Delhi.
4. Knowles, R. and Wareing, J. (1996): “Economic and Social Geography”, the Made Simple Series, Rupa & Co., Calcutta
5. 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
6. Siddhartha, K and Mukherjee, S. (2016): “Cities, Urbanisation and Urban Systems (Settlement Geography)”, KitabMahal, Allahabad
7. Singh, L. R. (2009): “Fundamentals of Human Geography”, Sharda Pustak Bhawan, Allahabad
8. Singh, R. Y. (2012): “Geography of Settlements”, Rawat Publications, Jaipur
9. Tiwari, R. C. (2016): “Geography of India”, Pravalika Publications, Allahabad
10. सावंत प्रकाश (१९९८) नागरी भूगोल, फडके प्रकाशन, कोल्हापूर
11. सवदी ए.बी. (२०१०) नागरी भूगोल, निराली प्रकाशन, पुणे</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>External, Semester End Examination 60% Individual Passing in Internal and External Examination</td></tr>
<tr><td>13</td><td>Continuous Evaluation through:
Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc.
Internal Continuous Assessment of 40 Marks
1. 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. (Marks – 20)
2. One online/ offline class test (Marks – 10)
3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 10)</td><td>Semester-End Examination of 60 Marks
1. This examination shall be of a 2-hour duration. Maximum marks 60.
2. There shall be four questions, each of 15 marks.
3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)</td></tr>
<tr><td>14</td><td colspan="2">Format of Question Paper: for the semester-end examination
Q. 1. Based on Modules 1 (15 Marks)
Q. 2. Based on Modules 2 (15 Marks)
Q. 3. Based on Modules 3 (15 Marks)
Q. 4. Based on Modules 4 (15 Marks)</td></tr>
</table>

Syllabus
B.A. (Geography)
(Sem.- III)

Title of Paper: Agricultural Geography

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Agricultural Geography" offered in Semester III of the SYBA Major Geography programme is a vital and relevant subject that focuses on one of the oldest and most essential human activities—agriculture. Agriculture is the backbone of the Indian economy and society, and understanding its geographical aspects is necessary for students who wish to explore the relationship between the environment, human activity, and economic development. This course provides a comprehensive introduction to the field of agricultural geography, enabling students to understand how farming patterns, practices, and problems vary across the world and within India. It also helps to connect traditional agricultural knowledge with modern scientific practices and policies. This course is highly useful for students aspiring to work in rural development, agricultural planning, research, and environmental consultancy. It is also helpful for competitive exams such as UPSC, MPSC, and other government services where agriculture is an important part of the syllabus. The growing interest in organic farming, sustainable agriculture, and agri-business startups also opens doors to entrepreneurship and innovation. This course builds interest among students by combining theory with real-life applications and prepares them for careers in both traditional and emerging sectors of the economy related to agriculture and development.
2	**Vertical :**	Major
3	**Type :**	Theory
4	**Credit**:	4 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	60 Hours
6	**Marks Allotted**:	100 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To acquaint students with the importance of agriculture in human civilization. 2. To understand the physical and man-made factors affecting agriculture. 3. To understand the role of technology in the development of agriculture. 4. To know the types of agriculture and their spatial distribution in the world. 5. To study the characteristics, importance, and issues related to agriculture in India and suggest remedial measures to overcome them.	

8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Understand the origin, diffusion, nature and scope of agriculture. 2. Explain the factors affecting agriculture. 3. Explain the role of technology in the development of agriculture. 4. Understand the types of agriculture and their distribution. 5. Understand the characteristics, importance, problems, and remedies of Indian agriculture.
9	**Modules**:- Per credit One module can be created
	Module 1: Introduction to Agriculture Geography (15 Lectures)
	1.1 Definition, nature and scope of Agricultural Geography. 1.2 Origin and diffusion of agriculture. 1.3 Agriculture and civilizations in the world. 1.4 Approaches to Agricultural Geography.
	Module 2: Determinants of Agriculture (15 Lectures)
	2.1 Physical and economic factors affecting agriculture. 2.2 Socio-cultural and Political Factors Affecting Agriculture 2.3 Role of technology in the development of agriculture. 2.4 Von Thunen's Theory of Agricultural Land Use
	Module 3: **Types of Agriculture and Distribution (15 Lectures)**
	3.1 Types of primitives/subsistence and commercial agriculture. 3.2 Classification of agricultural Regions: Whittlesey's classification 3.3 Distribution and trade of major food grains. 3.4 Modern trends in industrial crops: horticulture, floriculture, polyhouse, etc.
	Module 4: **Agriculture in India (15 Lectures)**
	4.1 Characteristics and importance of Indian agriculture. 4.2 Agriculture revolutions in India: Green, White. 4.3 Problems associated with Indian agriculture 4.4 Sustainable agricultural practices, organic Farming, and Agricultural Policies.
10	**Text Books:** 1. Singh, J. and Dhillon, S.S. (1988), "Agricultural Geography", 2nd edition, Tata McGraw-Hill, New Delhi. 2. कृषी भूगोल – डॉ. शिवराम ठाकूर, डॉ. राजाराम पाटील .व इतर Himalaya Publishing House. 3. कृषी भूगोल - डॉ. विठ्ठल घारपुरे. 4. भारताचा कृषी भूगोल – डॉ. समीर बुटाला व इतर.
11	**Reference Books:** 1. Hart, J.F. (1991): The land feeds us. 2. Bansil, B. C. (1975): 'Agricultural Problems of India', Delhi. 3. Bayliss Smith, T.P. (1987): The Ecology of Agricultural Systems. Cambridge University Press, London. 4. Berry, B. J. L. et. al. (1976): The Geography of Economic Systems. Prentice Hall, New York. 5. Gregor, H.P.: Geography of Agriculture. Prentice Hall, New York, 1970. 6. Grigg, D. (1984): 'An Introduction to Agricultural Geography', Hutchinson Publication, London 7. Grigg, D.B. (1974): The Agricultural Systems of the World. Cambridge University Press, New York. 8. Hartshorn, T.N. and Alexander, J.W. (1988): Economic Geography. Prentice Hall, New Delhi.

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<tr><td></td><td colspan="2">

9. Morgan W.B. and Norton, R.J.C. (1971): Agricultural Geography. Methuen, London,
10. Morgan, W. B. and Munton, R. J. C. (1977) 'Agricultural Geography' Methuen, London.
11. Morgan, W.B. (1978): Agriculture in the Third World - A Spatial Analysis. Westview Press.
12. Sauer, C. O. (1952): 'Agricultural Origins and Dispersals', American Geographical Journal.
13. Sauer, C.O. (1969): Agricultural Origins and Dispersals. M.I.T. Press, Mass, U.S.A.
14. Singh J. (1997): Agricultural Development in South Asia: A Comparative Study in the Green Revolution Experiences, National Book Organisation, New Delhi.
15. Singh, J. and Dhillon, S. S. (1984): 'Agricultural Geography', McGraw-Hill, New Delhi.
16. Singh, J. and Dhillon, S.S. (1988), "Agricultural Geography", 2nd edition, Tata McGraw-Hill, New Delhi.
17. Symons, L. (1972): 'Agricultural Geography', Bell and Sons, London
18. Tarrant, J.R. (1974): Agricultural Geography, Problems in Modern Geography Series, John Wiley and Sons.
19. Wigley, G. (1981), Tropical Agriculture: The Development of Production, 4th edition, Arnold, London.
20. अर्थिक भूगोल – डॉ. खतिब
21. अर्थिक भूगोल - डॉ. विठ्ठल घारपुरे.
22. भारतीय कषी विपणन – सवदी व केचे.

</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>External, Semester End Examination 60% Individual Passing in Internal and External Examination</td></tr>
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1. 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. (Marks – 20)
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Q. 2. Based on Modules 2 (15 Marks)</td></tr>
</table>

	Q. 3. Based on Modules 3 (15 Marks) Q. 4. Based on Modules 4 (15 Marks)

Syllabus
B.A. (Geography)
(Sem.- III)

Title of Paper: Social Geography

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Social Geography" offered in Semester III of the SYBA Geography Major programme is a timely and relevant exploration of the dynamic relationship between society and geographical space. It brings a humanistic dimension to geographical study, focusing not just on land and resources but on how people, communities, and social groups interact with their environments. In a country as diverse as India and an increasingly interconnected world, understanding social patterns, cultural identities, and spatial inequalities is more important than ever. This course equips students with the knowledge and analytical tools to examine how social factors such as religion, language, race, and cultural practices shape the geography of a place. The usefulness and application of this course are wide-ranging. Social geography is important in planning cities and towns in ways that respect cultural and religious diversity. It plays a role in public policy, especially in understanding the needs of minority and marginalised communities. It is useful in fields such as urban planning, rural development, disaster management, health geography, and education, where understanding the social background of communities is crucial for effective decision-making. Social geographers work with governments, NGOs, research institutes, and international development organisations to promote inclusive and equitable development. In today's job market, there is increasing demand for people who can understand and analyse social data spatially. Social geography provides key skills in data interpretation, mapping, critical thinking, and cultural sensitivity—skills that are valuable in social research, market analysis, policy planning, and community development. The subject also opens up career opportunities in teaching, civil services, journalism, human rights, and global organisations such as the UN or World Bank. For students interested in postgraduate study or research, this course lays a strong foundation for further academic work in human geography and related disciplines. The course is intellectually

		stimulating and socially relevant. It encourages students to look beyond the physical landscape and engage deeply with the human and cultural aspects of geography. As the world faces increasing social challenges—migration, conflict, inequality, and identity politics—understanding the geography behind these issues becomes essential. "Social Geography" offers students not just academic learning, but also a sense of responsibility and awareness to contribute meaningfully to society.
2	**Vertical :**	Major
3	**Type :**	Theory
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To learn the nature and scope of social and cultural geography. 2. To understand the approaches of the socio-cultural geography 3. To grasp the concept of social welfare and well-being in both theoretical and technical aspects. 4. To understand the dynamics of the social system. 5. To explore the social and cultural regions of the world and seek to provide an understanding of today's increasing problems in the world. 6. To familiarize oneself with sociocultural regions, movements and their impacts on economic, cultural and social activities.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Understand the scope and content of socio-cultural geography 2. Understand the concept of cultural hearth and realm, cultural diffusion, and diffusion of regions. 3. Develop an understanding of cultural segregation and cultural diversity, technology and development 4. Learn about the different races and racial groups of the world 5. Identify the socio-cultural space and regions of India 6. Understand the indicators of social welfare and wellbeing	
9	**Modules**:- Per credit One module can be created	
	Module 1: Introduction to Social Geography (15 Lectures)	
	1.1 Social Geography: Definition, Meaning, Nature and Scope 1.2 Approaches: Holistic, Qualitative and Quantitative and Other 1.3 Significance of Social Geography 1.4 Relationship between social geography and other social sciences.	
	Module 2: Social Stratification (15 Lectures)	
	2.1 Religion: Definition, types, social issues. 2.2 Linguistic Family:- Definition, Distribution, and Issues Related to Language 2.3 Race:-Definition, types and racial conflicts 2.4 Socio-cultural regions in the world	

10	**Text Books:** 1. Ahmad, A. (1999): "Social Geography", Rawat Publications, Jaipur 2. Jyptirmoy Sen (2007): A Text Book of Social and Cultural Geography, Kalyani Publishers, New Delhi. 3. घारपुरे विठ्ठल (१९९९) सामाजिक भूगोल, पिंपळापुरे अँड कं.,नागपूर	
11	**Reference Books:** 1. Banerjee-Guha, S. (2004): "Space, Society and Geography", Rawat Publications, Jaipur 2. Carter and Jones (2000) Social Geography – An Introduction to Contemporary Issues. 3. Desai, M. (2007): "Women and the Built Environment", Zuban Publications, Delhi. 4. Dutt, A., Wadhwa, V. et al (2012): "Facets of Social Geography: International and Indian Perspectives", Foundation Books, New Delhi 5. Gharpure, V. (2013): "Samajik ani anskrutik Bhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur 6. Karmarkar, D. (2012): "Fishy Spaces: Globalization and Livelihood of Indigenous Fishermen – A Case of Mumbai", LAP LAMBERT Academic Publishing, Germany 7. Knowles, R. and Wareing, J. (1996): "Economic and Social Geography", the Made Simple Series, Rupa & Co.	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 20 Marks** 1. 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. (Marks – 10) 2. One online/ offline class test (Marks – 05) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 05)	**Semester-End Examination of 30 Marks** 1. This examination shall be of a 1-hour duration. Maximum marks 30. 2. There shall be two questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 & 2 (15 Marks) Q. 2. Based on Modules 3 & 4 (15 Marks)	

Vertical - 4

VSC

Syllabus
B.A. (Geography)
(Sem.- III)

Title of Paper: Tools and Techniques of Spatial Analysis in Geography – III (Practicals)

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Tools and Techniques of Spatial Analysis in Geography – III (Practicals)" in Semester III of the SYBA Vocational Skill Course programme is designed to provide students with practical knowledge and hands-on experience in the various statistical and computational methods used in geographic research and analysis. As geography becomes increasingly data-driven, the ability to analyse and interpret spatial data using advanced tools is a vital skill that enhances students' capability to solve real-world geographical problems. This course focuses on equipping students with essential statistical tools and software skills to analyse data and extract meaningful insights, which are highly valued in the job market. The relevance of this course lies in the growing demand for professionals who can analyse and interpret geographic data using both traditional and modern methods. Geospatial data is essential in a wide range of industries, including urban planning, disaster management, environmental conservation, agriculture, transportation, and public health. As governments and private organisations increasingly rely on data-driven decision-making, there is a high demand for individuals who are proficient in statistical analysis and software applications. Students completing this course will be well-prepared to meet the industry's demands for skilled professionals who can manage, analyse, and interpret spatial data. The usefulness and application of this course extend beyond the classroom. The practical skills developed in this course are directly applicable in various real-world contexts. For instance, in urban planning, understanding the distribution of resources and populations is crucial for developing sustainable cities. In environmental management, analysing spatial data can help in monitoring climate change, deforestation, or water resources. The ability to analyse data and generate insights is also crucial in conducting research and formulating policies that address pressing issues such as poverty, inequality, and climate change. This course not only enhances students' academic knowledge but also prepares them for the workforce. Graduates with expertise in spatial

		analysis and statistical techniques are sought after in both the public and private sectors. Opportunities are available in governmental agencies, research institutes, consultancy firms, and international organisations. The course opens doors to careers in sectors like GIS (Geographic Information Systems), urban planning, environmental consultancy, market research, and data analysis. Additionally, it provides a solid foundation for students wishing to pursue higher studies in geography or related fields. The increasing reliance on data analysis in both governmental and corporate sectors makes this course an attractive option for students aiming to build a successful career in the evolving field of spatial analysis and geographical research.
2	**Vertical :**	VSC
3	**Type :**	Practical
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To acknowledge the importance and use of data. 2. To understand and compile the different types of data. 3. To learn data collection, representation and interpretation of different data. 4. To review and expand upon core topics in statistics, particularly by introducing the beneficiaries of the course by using MS Excel and SPSS for statistical computing. 5. To develop the observation, demonstration, compilation and representation skills.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students 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. Ability to compute absolute and relative measures of central tendency, dispersion, and deviation using MS Excel and SPSS 4. Understand and be able to solve the examples of measures of central tendency. 5. Knowledge about SPSS and its operations, representing data diagrammatically and graphically using MS Excel and SPSS	
9	**Modules**:- Per credit One module can be created	
	Module 1: Measures of Central Tendency, Dispersion, and Deviation (15 Lectures)	
	1.1 Mean, median, and mode – concept and importance 1.2 Mean, median, and mode - Grouped and Ungrouped data 1.3 Mean deviation and standard deviation 1.4 Quartile deviation	
	Module 2: Sampling Techniques and Use of Computer (SPSS/ Excel/ PSPP) (15 Lectures)	

	2.1 Moving averages – three and five years 2.2 Sampling: concept and types 2.3 Systematic and random – point, line, and area 2.4 Use of Computer (SPSS or Excel or PSPP Software) - Graphs and diagrams, Measures of central tendency, Dispersion and deviation	
10	**Text Books:** 1. Singh R. L., 2005. Elements of Practical Geography. Kalyani Publishers, New Delhi. 2. Karlekar, S. N. and Kale, M., 2006. Statistical Analysis of Geographical Data, Diamond Publication, Pune. 3. डॉ. प्रवीण सप्तर्षी,संख्याकी भूगोल,निराली प्रकाशन,पुणे	
11	**Reference Books:** 1. Singh R. L. and Dutt, P.K., 1968. Elements of Practical Geography, Students' Friends, Allahabad. 2. Jog. S. R. and Saptarshi, P. G., 1980. Sankhikhi Bhugol, Narendra Publication, Pune. 3. Creswell J., 1994. Research Design: Qualitative and Quantitative Approaches, Sage Publications. 4. Kumbhar, A., 2000. Pratyakshik Bhugol, Sumeru Publications, Mumbai. 5. Ahirrao, D. Y. and Karanjkhele, E.K., 2002. Pratyakshik Bhugol, Sudarshan Publication, Nashik. 6. Dikshit, R. D., 2003. The Art and Science of Geography: Integrated Readings. Prentice Hall of India, New Delhi. 7. Acevedo, M. F., 2012. Data Analysis and Statistics for Geography, Environmental Science and Engineering, CRC Press. 8. Rogerson, 2001, Statistical Methods for Geography Lab Manual, Quantitative Methods in Geography 9. Kirkpatrick and Brooke C. Feeney: PSS: A Simple Guide to IBM SPSS: for Version 22.0 10. डॉ. अर्जुन कुंभार, प्रात्यक्षिक भूगोल,सुमेरु प्रकाशन,डोंबिवली(पूर्व)	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 20 Marks** 1. Assignment/Project work/Journal/Case study /Presentation /Seminar /Field visit report/Book review, etc., to be conducted in the given semester before the semester-end examination. (Marks – 10) 2. One online/ offline class test (Marks – 05) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 05)	**Semester-End Examination of 30 Marks** 1. This examination shall be of a 1-hour duration. Maximum marks 30. 2. There shall be two questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)

14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 & 2 (15 Marks) Q. 2. Based on Modules 3 & 4 (15 Marks)

Syllabus
B.A. (Geography)
(Sem.- III)

Title of Paper: Tourism Survey and Planning (Practicals)

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Tourism Survey and Planning (Practicals)" offered in Semester III of the SYBA Vocational Skill Course programme aims to provide students with essential skills in the practical aspects of tourism research, survey methods, and planning. As tourism is one of the world's largest and fastest-growing industries, understanding how to assess, manage, and plan tourism activities is crucial for fostering sustainable and successful tourism destinations. This course is designed to equip students with the knowledge and hands-on experience necessary to conduct tourism surveys, analyse data, and contribute to the effective planning of tourism destinations, which are key components for tourism development in India and globally. The relevance of this course is immense, particularly in a country like India, where tourism plays a crucial role in economic growth and employment generation. With India being one of the most popular tourist destinations in the world, there is a growing need for skilled professionals who can conduct effective tourism surveys and plan for sustainable tourism development. This course provides students with the expertise required to enter this booming industry, addressing the need for skilled professionals in areas such as tourism management, destination marketing, environmental conservation, and cultural heritage preservation. The skills developed in this course have wide applications across both public and private sectors. Students will be prepared for roles in tourism boards, travel agencies, consultancy firms, research institutions, and government bodies involved in tourism development. The ability to conduct surveys, analyse tourism data, and develop sustainable tourism plans is highly sought after in today's job market, as more and more destinations are focusing on responsible and sustainable tourism. Graduates of this course can pursue careers in tourism planning, policy-making, destination marketing, environmental management, and community development. With the growth of eco-tourism, heritage tourism, and adventure tourism, there is an increasing demand for professionals who can ensure that tourism activities are planned and managed effectively,

		benefiting both tourists and local communities.
2	**Vertical :**	VSC
3	**Type :**	Practical
4	**Credit**:	4 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	60 Hours
6	**Marks Allotted**:	100 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To understand the principles and significance of tourism planning and survey techniques. 2. To explore various methodologies for conducting tourism surveys and analyzing data. 3. To develop practical skills in tourism planning at regional and destination levels. 4. To assess the role of stakeholders and sustainable practices in tourism development. 5. To apply knowledge through case studies and field surveys.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Understand the fundamental concepts, significance, and levels of tourism planning. 2. Analyse tourism data and interpret results for informed decision-making. 3. Evaluate the economic, social, cultural, and environmental impacts of tourism through planning strategies. 4. Develop tourism development plans considering sustainability, carrying capacity, and stakeholder participation. 5. Utilize GIS and digital tools for destination planning and tourism resource management. 6. Conduct field surveys, analyse tourism-related data, and present findings in a structured report. 7. Demonstrate critical thinking and problem-solving skills in real-world tourism planning scenarios. 8. Integrate sustainable tourism practices in destination planning to balance growth and conservation.	
9	**Modules**:- Per credit One module can be created	
	Module 1: Introduction to Tourism Survey (15 Lectures)	
	1.1 Definition and significance of tourism. 1.2 The role of surveys in tourism development. 1.3 Types of Surveys in Tourism: Visitor Surveys, Resident Surveys, Business Surveys. 1.4 Survey Methods: Questionnaire Design, interviews, online surveys, etc. - Sampling Techniques and Data Collection Tools.	
	Module 2: Introduction to Tourism Planning (15 Lectures)	
	2.1 Definition, nature, scope and Importance of tourism planning. 2.2 Levels and elements of tourism planning: Local, Regional, National, and International 2.3 Role of stakeholders in tourism planning 2.4 Role of GIS and Digital Tools in Tourism Planning.	

	Module 3: Planning for Sustainable Tourism Development (15 Lectures)
	3.1 Principles of Sustainable Tourism. 3.2 Community Participation in Tourism Planning 3.3 Strategies for Sustainable Tourism Planning 3.4 Contemporary Issues in Tourism Planning- (Natural & Manmade Hazards, Climate change and tourism, Technological advancements in tourism)
	Module 4: Field Survey and Practical Applications (15 Lectures)
	4.1 Analysis of successful and unsuccessful tourism planning initiatives in Maharashtra (e.g., development of hill stations, coastal tourism). 4.2 Conducting a Tourism Survey: Field Visit and Data Collection. 4.3 Report Writing and Presentation of Tourism Survey Findings. 4.4 Destination Planning Exercise: Developing a Tourism Plan for a Selected Area.
10	**Text Books:** 1. Bhatia, A. K. (2002). Tourism development: Principles and practices. New Delhi: Sterling Publishers Pvt. Ltd.
11	**Reference Books:** 1. Sharma, J. K. (2004). Tourism planning and development. New Delhi: Kanishka Publishers. 2. Dileep, M. R. (2014). Tourism: Concepts and principles. Kottayam: Mangalam Publications. 3. Negi, J. (2005). Tourism planning and development. New Delhi: Gitanjali Publishing House. 4. Singh, L. K. (2008). Fundamentals of tourism: Tourism development (Vol. 1). New Delhi: Isha Books. 5. Bhatia, A.K. (2012) - Tourism Development: Principles and Practices, Sterling Publishers. 6. Sharma, R. (2014) - Tourism and Environment, Kanishka Publishers. 7. Seth, P.N. (2010) - Successful Tourism Management, Sterling Publishers. 8. Gupta, S.P. & Lal, K. (2008) - Tourism, Museums and Monuments in India, Oriental Publishers. 9. Kaul, R.K. (1985) - Dynamics of Tourism: A Trilogy, Sterling Publishers. 10. Kumar, S. & Tiwari, A.K. (2017) - Tourism Planning and Development, Anmol Publications. 11. Rana, P.B. (2013) - Tourism Planning and Development in India, Kanishka Publishers. 12. Sharma, J.K. (2018) - Tourism Planning and Development: A Global Perspective, Kanishka Publishers. 13. Mishra, M.N. (2015) - Sustainable Tourism Development in India, Regal Publications. 14. Agarwal, V.K. (2011) - Travel and Tourism Management, Prentice Hall India. 15. Das, M. & Chakrabarti, B. (2012) - Tourism Geography and Planning, PHI Learning. 16. Roy, H. & Mandal, S. (2019) - Tourism and Sustainable Development in India, Concept Publishing. 17. Verma, S. (2010) - Tourism Research Methods and Applications, Oxford Book Company. 18. Singh, S. (2006) - Tourism in India: Planning and Development, Gyan Publishing House. 19. Negi, J.M.S. (1990) - Tourism and Hoteliering, Gitanjali Publishing House. 20. Chaudhary, M. (2011) - Tourism Marketing, Oxford University Press.

12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 40 Marks** 1. Assignment/Project work/Journal/Case study /Presentation /Seminar /Field visit report/Book review, etc., to be conducted in the given semester before the semester-end examination. (Marks – 20) 2. One online/ offline class test (Marks – 10) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 10)	**Semester-End Examination of 60 Marks** 1. This examination shall be of a 2-hour duration. Maximum marks 60. 2. There shall be four questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 (15 Marks) Q. 2. Based on Modules 2 (15 Marks) Q. 3. Based on Modules 3 (15 Marks) Q. 4. Based on Modules 4 (15 Marks)	

SEC

Syllabus
B.A. (Geography)
(Sem.- III)

Title of Paper: Surveying Skills in Human Geography (Practicals)

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Surveying Skills in Human Geography (Practicals)" offered in Semester III as a Skill Enhancement Course is designed to provide students with the practical tools and techniques necessary for conducting surveys in human geography. This course aims to equip students with hands-on experience in designing, conducting, and analysing surveys, which are vital for understanding the relationship between people, their environment, and their socio-economic conditions. In the modern world, where data-driven decisions are key to social, economic, and environmental planning, surveying skills are increasingly in demand. By gaining expertise in survey methods, students can contribute meaningfully to research, policy-making, and development efforts. The relevance of this course is significant in today's world where there is a growing need for reliable data to inform policy decisions, business strategies, and academic research. In India, where rapid urbanisation, socio-economic inequalities, and environmental concerns are prominent, the need for skilled survey professionals is increasing. From government agencies and NGOs to research organisations and private consultancies, there is a high demand for individuals who can conduct thorough, ethical surveys that provide valuable insights into human geography. This course prepares students to meet this demand by giving them the technical and analytical skills needed to conduct quality surveys. The usefulness and application of this course extend beyond academics into real-world industries. Surveying skills are essential in sectors such as urban and rural planning, market research, social work, policy-making, and environmental management. These skills are also valuable for roles in demographic studies, public health, education, and transportation planning. As cities grow and societies evolve, decision-makers rely on data collected through surveys to craft effective policies and interventions. The ability to conduct accurate

		and reliable surveys is essential for understanding the needs of communities, designing effective policies, and measuring the impact of various interventions. In terms of job prospects, this course opens doors to a variety of career paths. Graduates with strong surveying skills are in demand across several sectors, including government agencies, international organisations, NGOs, urban development firms, market research companies, and academic research institutions. Surveying skills are highly valued in fields such as geographic information systems (GIS), demographic analysis, environmental consultancy, and social research. The ability to analyse and interpret survey data is a key skill for anyone working in urban planning, policy research, community development, or even in the tourism industry. With data-driven decision-making becoming more common in both public and private sectors, the job prospects for students who complete this course are diverse and promising.
2	**Vertical :**	SEC
3	**Type :**	Practical
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To introduce the foundational concepts, significance, and ethical considerations in human geographical surveys. 2. To familiarise students with various types, stages, and methods of conducting human geography surveys. 3. To develop practical skills in designing effective questionnaires and interpreting geotagged visual data. 4. To enable students to conduct field surveys and communicate findings through structured report writing.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Explain the meaning, features, and ethical dimensions of surveying in human geography. 2. Demonstrate an understanding of different survey types and apply appropriate methods during various phases of a survey. 3. Design, structure, and administer questionnaires suited to specific survey needs in rural or urban settings. 4. Gain hands-on experience in conducting surveys and preparing comprehensive survey reports, including geospatial and visual data.	
9	**Modules**:- Per credit One module can be created	
	Module 1: Fundamentals of Surveying in Human Geography (15 Lectures)	
	1.1 Survey: Meaning, Features, Ethics, and Importance 1.2 Types of Survey: Descriptive vs Analytical, Census vs Sample Survey, Social and Economic Survey 1.3 Surveying Steps: Pre-survey, Actual Survey, and Post-survey 1.4 Methods of Survey: Personal Interviews, Self-administered Questionnaires, Group	

	Surveys, Mailed Surveys, Telephonic Surveys, Online Surveys	
	Module 2: Surveying Skills (15 Lectures)	
	2.1 Preparing Questionnaires: Types of questions, Structuring of a questionnaire 2.2 Geotagged Photographic Survey and Mental Maps 2.3 Survey Report Writing: Introduction, Objectives, Study Area, Methodology, Survey Observations, Conclusion 2.4 Conducting a Survey of Rural or Urban Locality and Survey Report Writing	
10	**Text Books:** 1. Kothari, C. R. (1985) 'Research Methodology: Methods and Techniques', New Age International Publishers, New Delhi. 2. नागतोडे, पि. एम. (२०१२) 'भूगोलशास्त्रीय संशोधनतंत्राची मूलतत्त्वे', पिंपळापूरे ॲण्ड कंपनी पब्लिशर्स, नागपूर.	
11	**Reference Books:** 1. Gupta, S. L. and Gupta, H. (2014) 'Research Methodology', International Book House Pvt. Ltd. 2. Krishnaswami, O. R. and Ranganatham, M. (2022) 'Methodology of Research in Social Sciences', Himalaya Publishing House, Mumbai. 3. धुरी, नि. (२००८) 'संशोधन पद्धती', फडके प्रकाशन, कोल्हापूर. 4. बोरुडे, र. र. (२००८) 'संशोधन पद्धतीशास्त्र', विद्यार्थी गृह प्रकाशन, पुणे	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 20 Marks** 1. Assignment/Project work/Journal/Case study /Presentation /Seminar /Field visit report/Book review, etc., to be conducted in the given semester before the semester-end examination. (Marks – 10) 2. One online/ offline class test (Marks – 05) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 05)	**Semester-End Examination of 30 Marks** 1. This examination shall be of a 1-hour duration. Maximum marks 30. 2. There shall be two questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 & 2 (15 Marks) Q. 2. Based on Modules 3 & 4 (15 Marks)	

Semester - IV

Vertical – 1
Major

Syllabus
B.A. (Geography)
(Sem.- IV)

Title of Paper: Geography of Urban Settlements

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course titled "Geography of Urban Settlements" in Semester IV of the SYBA Geography Major Programme offers an in-depth exploration of the complex and dynamic field of urban geography. Urban settlements are central to the functioning of modern societies, and understanding their structure, growth, and the challenges they face is crucial for students who aspire to work in urban planning, policy-making, environmental management, or other sectors where human geography intersects with urban development. This course aims to provide students with a comprehensive understanding of urban settlements, their evolution, the factors influencing their development, and the pressing issues they encounter today. Urban geography is a rapidly evolving field that examines the physical, social, and economic dimensions of cities and towns. The relevance of this course is immense, particularly in the context of India's rapidly urbanizing society. With over 30% of the Indian population residing in urban areas, understanding the complexities of urban settlements is vital for addressing the challenges of urban growth and development. This course provides students with the knowledge and skills to understand the spatial, economic, and social aspects of urban settlements, which is essential for tackling issues such as slum development, infrastructure deficits, and urban sprawl. The usefulness and application of this course are vast. Urban geography provides crucial insights for urban planners, policymakers, environmentalists, and developers, helping them make informed decisions about the growth and development of cities. The skills learned in this course can be applied to a variety of fields such as urban planning, real estate, environmental management, and transport planning. Additionally, as cities play an increasing role in addressing global challenges like climate change and sustainability, expertise in urban geography is in high demand. Job prospects for students completing this course are strong, particularly in sectors related to urban development, planning, and management. Graduates can pursue careers in urban planning agencies, government departments, international organizations, non-governmental organizations (NGOs), and private consultancy firms. Roles such

		as urban planners, spatial analysts, environmental consultants, and policy advisors are all potential career paths. Additionally, the growing focus on sustainable cities and smart city initiatives in India and abroad offers fresh opportunities for students to work on projects that aim to create livable, efficient, and environmentally friendly urban spaces.
2	**Vertical :**	Major
3	**Type :**	Theory
4	**Credit**:	4 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	60 Hours
6	**Marks Allotted**:	100 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To study the basics of Urban Geography. 2. To study the types of Urban Settlements, sites, and situations. 3. To gain an understanding of the relationship between human activities and urban development. 4. To enable students to handle the present problematic situations in urban areas. 5. To prepare students to become good urban planners and environmental conservators.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Understand the importance of urban settlements through urban geography. 2. Understand the types of Urban Settlements, sites, and situations. 3. Apply the relationship between human activities and urban development. 4. Understand present urban problems and be capable of addressing them. 5. Handle the present problematic situations in urban areas. 6. Develop into good urban planners and environmental conservators.	
9	**Modules**:- Per credit One module can be created	
	Module 1: Introduction to Geography of Urban Settlements (15 Lectures)	
	1.1 Urban Geography: **-** Definition, Nature, and Scope. 1.2 Approaches to the Study of Urban Geography. 1.3 Urban Settlement Geography in relation to other subjects. 1.4 Growth and Development of Urban Geography	
	Module 2: Urban Settlements (15 Lectures)	
	2.1 Site and Situation:- Concept, factors. 2.2 Functional Classification of Towns. 2.3 Patterns of Urban Settlement:- Linear, Rectangular, Circular, Star and related other patterns. 2.4 Forms of Cities: rural, town, city, twin, conurbation, metropolis, cosmopolis, megalopolis, global city, etc.	
	Module 3: **Urbanization (15 Lectures)**	
	3.1 Rural-Urban Fringe: concept, characteristics, types and responsible factors. 3.2 Urbanization: **-** Concept, determinants of urbanisation. 3.3 Cities and Their Umland: Concept, types, and determinants of Umland. 3.4 The Central Business District (CBD**) – (**Characteristics, Classification, Delimitation, Parameters)	

	Module 4: **Urban Problems and Planning (15 Lectures)**	
	4.1 Contemporary Urban Problems. 4.2 Urban Planning: Meaning, Aims, Types and Needs of Urban Planning. 4.3 Concepts of Urban Planning: – garden city, new town, urban renewal, and master plan. 4.4 Sustainable Cities:- Concept, Characteristics, Needs and Features.	
10	**Text Books:** 1. डॉ. विठ्ठल घारपुरे (2013) नागरी भूगोल पिंपळापुरे पब्लिकेशन नागपूर. 2. डॉ. हेमंत पेडणेकर , डॉ. शिवराम ठाकूर , डॉ. राजाराम पाटील, वस्ती भूगोल, कोकण जिओग्राफर असोसिएशन ऑफ इंडिया प्रकाशन 3. डॉ. शिवराम ठाकूर, डॉ. राजाराम पाटील, मानव भूगोल - सेट पब्लिकेशन, मुंबई 4. Thakur S. A. and others – "Settlement Geography"/ *Vasti Bhugol*- Konkan Geographers, Publication (2016) 5. S.D.Maurya (2022) URBAN GEOGRAPHY Sharda Pustak Bhawan Prayagraj U.P. 6. Leong, Goh-Cheng and Morgan, G. (1994): "Human and Economic Geography", Oxford University Press, Oxford	
11	**Reference Books:** 1. सावंत प्रकाश (1998) नागरी भूगोल, फडके प्रकाशन कोल्हापूर. 2. सवदी ए.बी. (2010) नागरी भूगोल निराली, प्रकाशन पुणे. 3. देशपांडे सी.डी. (1983) शहरे- कॉन्टीनेंटल प्रकाशन, पुणे. 4. खतीब के.ए. (2007) वसाहत भूगोल अजब प्रकाशन कोल्हापूर. 5. सवदी, कोळेकर, (2005) आधुनिक भूगोल निराली प्रकाशन, पुणे. 6. डॉ. ठिगळे - महाजन, डॉ. शिंदे, डॉ. हजारे, डॉ. पवार (2024) "नागरी भूगोल" अथर्व पब्लिकेशन, जळगाव. 7. एन. जी. शिंदे , आर. व्ही. ताटीपामूल "नागरी भूगोल" चिन्मय प्रकाशन ,छत्रपती संभाजी नगर. 8. डॉ.सावन देशमुख (2024) "नागरी भूगोल" प्रशांत पब्लिकेशन ,जळगाव, 9. रतन जोशी (2020) राजस्थान हिंदी ग्रंथ भांडार,जयपूर,राजस्थान. 10. Carter, H. (1995): The Study of Urban Geography. 4th ed. Reprinted in 2002 by Rawat Publications, Jaipur and New Delhi. 11. Hall, T. (2001): Urban Geography. 2nd edition. Routledge, London. 12. Haughton, G. and Hunter, C. (1994): Sustainable Cities. Jessica Kingsley, London. 13. Johnson, J.H. (1981): Urban Geography, Pergamon Press, Oxford. 14. Mayer, H. and Cohn, C. F. (1959): Readings in Urban Geography, University of Chicago Press, Chicago. 15. Paddison, R. (ed.) (2001): Handbook of Urban Studies. Sage, London. 16. Michael Pacione (2009) Urban Geography: A Global Perspective- Routledge Publisher, U.K. 17. L.N. Verma (2008) Urban Geography, Rawat Publications-Jaipur. 18. Ramachandran, R. (1991): Urbanisation and Urban Systems in India. Oxford University Press, Delhi. 19. Ramachandran R (1989) Urbanisation and Urban Systems of India, Oxford University Press, New Delhi. 20. Johnson J.H. (1967): Urban Geography, An Introductory Analysis. 21. Knox P. L. and McCarthy L., (2005) Urbanization: An Introduction to Urban Geography, Pearson Prentice Hall, New York. 22. Ghosh. S. (2015): "Introduction to Settlement Geography", Orient Blackswan Private Limited, Hyderabad.	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**

13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 40 Marks** 1. 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. (Marks – 20) 2. One online/ offline class test (Marks – 10) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 10)	**Semester-End Examination of 60 Marks** 1. This examination shall be of a 2-hour duration. Maximum marks 60. 2. There shall be four questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 (15 Marks) Q. 2. Based on Modules 2 (15 Marks) Q. 3. Based on Modules 3 (15 Marks) Q. 4. Based on Modules 4 (15 Marks)	

Syllabus
B.A. (Geography)
(Sem.- IV)

Title of Paper: Industrial Geography

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Industrial Geography" offered in Semester IV for SYBA Geography students provides an in-depth understanding of the spatial organization and dynamics of industries across the globe, with a particular focus on India. Industrial geography is a branch of human geography that explores the relationship between industries, the environment, and human societies, examining the factors that influence industrial location, the distribution of industries, and the socio-economic consequences of industrial development. In a rapidly industrializing world, where issues such as urbanization, environmental sustainability, and economic development are at the forefront of global challenges, this course provides essential knowledge for students aiming to pursue careers in urban planning, industrial policy, environmental management, and other related fields. The relevance of this course is significant, especially in the context of India's ongoing industrialization. As the country seeks to become a global manufacturing hub, understanding the geography of industries is essential for developing effective policies that promote balanced regional growth, environmental sustainability, and social equity. The skills and knowledge gained in this course are directly applicable to a wide range of industries, including manufacturing, energy, transport, and services. Moreover, the ability to assess the environmental and social impacts of industrial activities is a key skill in today's job market, where sustainability and corporate responsibility are increasingly emphasized. The usefulness and application of industrial geography are vast, with applications in urban and regional planning, environmental consulting, policy-making, and industrial management. The course equips students with the ability to analyze industrial trends, assess the impacts of industrialization on communities, and propose solutions for sustainable development. These skills are in high demand in both the public and private sectors, particularly in industries that are seeking to improve their sustainability practices and reduce their carbon footprint. Job prospects for graduates of this course are diverse and promising. With India's growing focus on industrial development, there is a significant demand for experts who can analyze industrial

		landscapes, plan for sustainable growth, and address environmental challenges. Career opportunities exist in government agencies, urban planning departments, environmental consultancies, multinational corporations, and NGOs working on industrial development and sustainability. Students can pursue roles such as industrial planners, environmental consultants, policy analysts, urban development experts, and CSR specialists. Additionally, the increasing importance of sustainable industries and eco-friendly technologies opens up new career paths in green industries and renewable energy sectors.
2	**Vertical :**	Major
3	**Type :**	Theory
4	**Credit**:	4 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	60 Hours
6	**Marks Allotted**:	100 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To memorize the basic concepts in Industrial Geography 2. To classify the industrial regions based on various factors 3. To apply their understanding of the distribution of economic and industrial zones 4. To associate industrial hazards and environmental problems 5. To compare the various case studies of industrial disasters 6. To assess the industrial challenges and sustainable development	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Memorize the basic concepts in Industrial Geography (Level: Knowledge) 2. Classify the industrial regions based on various factors (Level: Comprehension) 3. Apply their understanding of the distribution of economic and industrial zones (Level: Application) 4. Associate industrial hazards and environmental problems (Level: Analysis) 5. Compare the various case studies of industrial disasters (Level: Synthesis) 6. Assess the industrial challenges and sustainable development (Level: Comprehension)	
9	**Modules**:- Per credit One module can be created	
	Module 1: Fundamentals of Industrial Geography (15 Lectures)	
	1.1 Nature, Scope, and Importance of Industrial Geography 1.2 Factors Influencing Industrial Location 1.3 Theories of Industrial Location (Weber, Losch) 1.4 Role of Industries in Economic Development	
	Module 2: Industrial Classification and Regional Distribution (15 Lectures)	
	2.1 Classification of industries in India 2.2 Major Industrial Regions of India 2.3 Major Industrial Regions of Maharashtra 2.4 Industrial Corridors in India (DMIC, CBIC, AKIC, ECEC)	
	Module 3: **Industrialization, Urbanization, and Globalization (15 Lectures)**	

	3.1 Interrelationship Between Industrialization and Urbanization 3.2 Impact of Globalization on Industrial Growth (MNCs, FDI, Global Supply Chains) 3.3 Industrial Policies of India 3.4 Emerging Industrial Trends	
	Module 4: **Industrial Challenges and Sustainable Development (15 Lectures)**	
	4.1 Environmental problems caused by industries 4.2 Case Studies: Bhopal Gas Tragedy, Minamata Disease, Chornobyl Disaster 4.3 Overview of the Green Industry 4.4 Sustainability in Industrial Development (CSR, Green Manufacturing, Eco-Industrial Parks)	
10	**Text Books:** 1. Maurya, S D (2018) Economic Geography, Pravalika Publications, Allahabad. 2. Guatam Alka (2021) Advanced Economic Geography, Sharda Pustak Bhavan, Prayagraj.	
11	**Reference Books:** 1. Alexander, J. W. (1988). Economic geography. Prentice-Hall. 2. Blaikie, P., & Brookfield, H. (1987). Land degradation and society. Methuen. 3. Chadwick, G. (1971). A systems view of planning. Pergamon Press. 4. Henderson, J. V. (1997). Industrial development in cities. Journal of Urban Economics, 42(3), 449-470. https://doi.org/10.1006/juec.1997.2033 5. Isard, W. (1956). Location and space economy. The MIT Press. 6. Krugman, P. (1991). Increasing returns and economic geography. Journal of Political Economy, 99(3), 483-499. https://doi.org/10.1086/261763 7. Porter, M. E. (1990). The competitive advantage of nations. Harvard Business Review, 68(2), 73-93. 8. Scott, A. J. (2006). The changing global geography of industrial production: An introductory survey. International Journal of Urban and Regional Research, 30(2), 201-205. https://doi.org/10.1111/j.1468-2427.2006.00658.x 9. Seth, V. K. (2014). Industrial geography. Rawat Publications. 10. Smith, D. M. (1981). Industrial location: An economic geographical analysis. Wiley. 11. Weber, A. (1909/1929). Theory of the location of industries (C. J. Friedrich, Trans.). University of Chicago Press.	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 40 Marks** 1. 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. (Marks – 20) 2. One online/ offline class test (Marks – 10) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing	**Semester-End Examination of 60 Marks** 1. This examination shall be of a 2-hour duration. Maximum marks 60. 2. There shall be four questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)

	environment-related activities (Marks – 10)	
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 (15 Marks) Q. 2. Based on Modules 2 (15 Marks) Q. 3. Based on Modules 3 (15 Marks) Q. 4. Based on Modules 4 (15 Marks)	

Syllabus
B.A. (Geography)
(Sem.- IV)

Title of Paper: Environmental Geography

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The course "Environmental Geography" offered in Semester IV of the SYBA Geography program introduces students to the intricate relationship between human activities and the natural environment. Environmental geography is a dynamic and multidisciplinary field that explores the interactions between humans and the environment, with an emphasis on understanding how human societies impact the natural world and vice versa. In the current global context, where environmental concerns such as climate change, biodiversity loss, and pollution are critical, this course equips students with the knowledge and tools to understand, analyze, and address environmental issues. It is highly relevant, especially in today's world, where sustainable development has become a primary goal for countries and industries worldwide. The relevance of this course is increasingly evident as the world grapples with the consequences of environmental degradation. Issues such as air and water pollution, deforestation, loss of biodiversity, and the impacts of climate change are global challenges that require a deep understanding of the human-environment relationship. This course equips students with the necessary knowledge to understand these issues and provides them with the skills needed to contribute to the development of sustainable solutions. As industries and governments worldwide shift their focus toward sustainability, the need for environmental experts, policy advisors, and managers has never been greater. The usefulness and application of this course are far-reaching. Graduates can apply their knowledge in various fields, including environmental consultancy, urban planning, policy-making, disaster management, and sustainable business practices. Understanding the principles of environmental management allows students to work in both the public and private sectors to ensure that development activities do not harm the environment and that natural resources are used efficiently. Additionally, students will gain valuable skills in conducting environmental impact assessments, a crucial aspect of modern development and planning. Given the growing emphasis on sustainability in both national and

		international policies, there is a strong demand for professionals with expertise in environmental geography. Industries are increasingly adopting sustainable practices, and governmental agencies are enacting stricter environmental regulations. As a result, job prospects in the environmental sector are expanding rapidly. Career opportunities exist in various sectors, including environmental research, urban development, natural resource management, conservation, environmental policy, and corporate social responsibility (CSR). Graduates of this course can work as environmental consultants, sustainability officers, policy analysts, or project managers for both governmental and non-governmental organizations. They may also find opportunities in international agencies working on global environmental issues, such as the United Nations or the World Bank.
2	**Vertical :**	Major
3	**Type :**	Theory
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To introduce students to the basic concepts of environmental geography. 2. To understand the interactions between human activities and the natural environment. 3. To analyse contemporary environmental issues and sustainable solutions. 4. To develop awareness of environmental conservation efforts.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Understand key environmental concepts and challenges 2. Analyse human impacts on the environment. 3. Develop awareness of sustainable practices and policies. 4. Apply geographical knowledge to real-world environmental issues.	
9	**Modules**:- Per credit One module can be created	
	Module 1: Introduction to Environmental Geography (15 Lectures)	
	1.1 Definition, scope, and importance of Environmental Geography 1.2 Components of the environment: Lithosphere, Hydrosphere, Atmosphere, Biosphere 1.3 Concept of ecosystems, Ecosystem structure and function, Biogeochemical cycles 1.4 Human-environment interaction: Perspectives (Determinism, Possibilism, Neo-determinism)	

	Module 2: Environmental Management (15 Lectures)	
	2.1 Concept of Environment Management, Need, Environmental Management Systems (EMS): Environmental impact assessment 2.2 Natural Resource, Management: Concept and need, Conservation of natural resources like water, soil, and forests. 2.3 Pollution Control Management: Measures for reducing and controlling pollution 2.4 Overview of SDGs	
10	**Text Books:** 1. Environmental Geography by Savindra Singh 2. पर्यावरण भूगोल (डॉ. शिवराम ठाकूर , डॉ. राजाराम पाटील)	
11	**Reference Books:** 1. Environmental Geography by Savindra Singh 2. Introduction to Environmental Geography by Garrett Nagle 3. Environment and Ecology by Majid Husain 4. Environmental Geography (Dr Satish P Patil, Dr Mohan R. Vaishampayan) 5. भूगोल आणि पर्यावरण (ए.बी.सवदी सर) 6. पर्यावरण भूगोल (डॉ. घारपुरे) 7. पर्यावरण भूगोल (डॉ. शिवराम ठाकूर , डॉ. राजाराम पाटील)	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 20 Marks** 1. 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. (Marks – 10) 2. One online/ offline class test (Marks – 05) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 05)	**Semester-End Examination of 30 Marks** 1. This examination shall be of a 1-hour duration. Maximum marks 30. 2. There shall be two questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 & 2 (15 Marks) Q. 2. Based on Modules 3 & 4 (15 Marks)	

Vertical - 4

VSC

Syllabus
B.A. (Geography)
(Sem.- IV)

Title of Paper: Tools and Techniques of Spatial Analysis in Geography – IV (Practicals)

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The "Tools and Techniques of Spatial Analysis in Geography – IV (Practicals)" course for SYBA Geography students offers a comprehensive hands-on approach to learning essential geographic tools used in modern spatial analysis. This course focuses on practical aspects of photography, remote sensing, geographic information systems (GIS), and global positioning systems (GPS), which are indispensable for spatial data collection, analysis, and interpretation. As technology continues to evolve, the relevance of these tools in geographical research and applications is becoming increasingly significant. This course equips students with the necessary skills and techniques to engage with current spatial data analysis methods, preparing them for future roles in various industries that rely heavily on spatial data, such as urban planning, environmental management, disaster management, and more. The relevance of this course lies in the increasing integration of technology in geography and spatial analysis. As the world becomes more interconnected and reliant on spatial data, the demand for skilled professionals who can effectively use tools like GIS, GPS, and remote sensing continues to grow. These tools are not only essential for academic research but also industry applications such as urban development, environmental monitoring, natural resource management, and disaster management. The ability to collect, analyze, and interpret spatial data accurately is a key skill in today's job market, making this course highly relevant for students looking to pursue careers in various sectors. The usefulness of this course extends beyond the classroom, providing students with practical, hands-on skills that are directly applicable to real-world problems. The course equips students with a deeper understanding of spatial analysis techniques and the ability to apply them in different geographical contexts. As industries increasingly rely on spatial data for decision-making, students with proficiency in GIS, GPS, and remote sensing will be well-positioned to enter fields such as urban planning, environmental consulting, transportation, and emergency management. Job prospects for graduates who complete this course are varied and promising. GIS and

		remote sensing specialists are in demand across a range of industries, from government agencies to private companies. Positions such as GIS analyst, remote sensing technician, urban planner, environmental consultant, and spatial data scientist are just a few examples of career paths available. The growing use of spatial data in industries such as agriculture, transportation, healthcare, and tourism ensures that students with expertise in these tools will find ample opportunities in both the public and private sectors.
2	**Vertical :**	VSC
3	**Type :**	Practical
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To introduce students to different types of photographic interpretation used in spatial analysis. 2. To develop an understanding of the basic concepts, components, and applications of remote sensing. 3. To familiarize students with Geographic Information Systems (GIS) and their role in spatial data management and analysis. 4. To explain the working principles and applications of the Global Positioning System (GPS) in geographical studies. 5. To equip students with practical skills in spatial data collection, analysis, and interpretation for real-world applications.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Interpret different types of photography (aerial, satellite, and terrestrial) for spatial analysis. 2. Gain foundational knowledge of remote sensing, including its components, types, and applications. 3. Develop the ability to analyse and apply GIS data for geographic research and mapping. 4. Understand the principles and functions of GPS, along with its real-world applications. 5. Acquire practical skills in spatial data handling and analysis, enhancing their ability to solve geographical problems.	
9	**Modules**:- Per credit One module can be created	
	Module 1: Types of Photography, Interpretation & Remote Sensing (15 Lectures)	
	1.1 Aerial Photography, Satellite Imagery and Terrestrial (Ground) Photography, Interpretation and Analysis of Aerial Photography 1.2 Key Components of Remote Sensing 1.3 Types of Remote Sensing 1.4 Remote Sensing Image reading / Stereoscope instrument / Manual reading	
	Module 2: Basic Concept of GIS and GPS (15 Lectures)	
	2.1 Definition and Key Components and Types of GIS Data 2.2 Free GIS Software and Web GIS Portal Informational 2.3 Definition and Components of GPS and How GPS Works 2.4 Applications of GPS (Mobile GPS)	

10	**Text Books:** 1. CBSE (not dated) Geospatial Technology, Textbook for Std XI, New Delhi 2. CBSE (not dated) Geospatial Technology, Textbook for Std XII, New Delhi 3. Bhatta Basudeb (2018) Remote Sensing and GIS, Oxford University Press, New Delhi	
11	**Reference Books:** 1. ampbell, J. B., & Wynne, R. H. (2011). Introduction to Remote Sensing. The Guilford Press. 2. ensen, J. R. (2016). Remote Sensing of the Environment: An Earth Resource Perspective. Pearson. 3. urrough, P. A., & McDonnell, R. A. (1998). Principles of Geographical Information Systems. Oxford University Press. 4. hang, K. T. (2016). Introduction to Geographic Information Systems. McGraw-Hill Education. 5. eywood, I., Cornelius, S., & Carver, S. (2011). An Introduction to Geographical Information Systems. Pearson Education. 6. ongley, P. A., Goodchild, M. F., Maguire, D. J., & Rhind, D. W. (2015). Geographic Information Science and Systems. Wiley. 7. illesand, T. M., Kiefer, R. W., & Chipman, J. W. (2015). Remote Sensing and Image Interpretation. Wiley. 8. l-Rabbany, A. (2002). Introduction to GPS: The Global Positioning System. Artech House. 9. olstad, P. (2016). GIS Fundamentals: A First Text on Geographic Information Systems. XanEdu Publishing. 10. abbins, F. F. (2007). Remote Sensing: Principles and Interpretation. Waveland Press.	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 20 Marks** 1. Assignment/Project work/Journal/Case study /Presentation /Seminar /Field visit report/Book review, etc., to be conducted in the given semester before the semester-end examination. (Marks – 10) 2. One online/ offline class test (Marks – 05)	**Semester-End Examination of 30 Marks** 1. This examination shall be of a 1-hour duration. Maximum marks 30. 2. There shall be two questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)

	3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 05)	
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 & 2 (15 Marks) Q. 2. Based on Modules 3 & 4 (15 Marks)	

SEC

Syllabus
B.A. (Geography)
(Sem.- IV)

Title of Paper: Techniques of Topographical Map Interpretation (Practicals)

Sr. No.	Heading	Particulars
1	**Description of the course :** **Including but not limited to :**	The "Techniques of Topographical Map Interpretation (Practicals)" course is designed to equip SYBA Geography students with essential skills for understanding and analysing topographical maps. These maps are crucial for depicting the natural and cultural features of a region, and they are widely used in fields like urban planning, environmental management, resource mapping, and disaster management. This course provides students with a strong foundation in both the theoretical and practical aspects of topographical map interpretation, which is an important skill for any aspiring geographer. By learning how to read and interpret topographical maps, students will gain valuable insights into the complex relationships between the physical environment and human activities. The relevance of this course is increasingly apparent in today's world, where geographical information and spatial analysis are critical for informed decision-making in various sectors. As cities expand, natural resources are exploited, and environmental concerns grow, the need for professionals who can interpret and analyze topographical maps is more important than ever. The demand for skilled map interpreters extends beyond academia and into industries such as urban planning, environmental consultancy, natural resource management, and disaster response. The usefulness of this course is undeniable, as it provides students with practical, real-world skills that can be applied in numerous professional contexts. Students will gain hands-on experience in interpreting topographical maps, which are used daily by professionals in fields such as cartography, urban planning, environmental science, and civil engineering. These skills are not only valuable for students pursuing careers in geography but also for those entering related fields that require spatial analysis and decision-making. In terms of job prospects, the ability to interpret topographical maps opens up a wide range of career opportunities. Graduates can pursue roles in urban planning, environmental consultancy, land surveying, disaster management, and resource management. With the increasing use of geographic information systems (GIS) and remote

		sensing technologies, the demand for professionals skilled in map interpretation and spatial analysis is growing in both the public and private sectors. Job roles such as GIS analyst, cartographer, urban planner, environmental consultant, and disaster response planner are just a few examples of the career paths available to graduates.
2	**Vertical :**	SEC
3	**Type :**	Practical
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To develop skills in reading and interpreting topographical maps. 2. To understand the representation of physical and cultural features on topographical maps. 3. To apply map interpretation techniques for spatial analysis and problem-solving. 4. To enhance practical knowledge of contour interpretation, scale, and map measurements.	
8	**Course Outcomes**: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Interpret and analyse topographical maps accurately. 2. Identify and represent physical and cultural features on maps. 3. Use map interpretation techniques for real-world applications. 4. Demonstrate proficiency in contour analysis, scale calculation, and map measurements.	
9	**Modules**:- Per credit One module can be created	
	Module 1: Fundamentals of Topographical Map Interpretation (15 Lectures)	
	1.1 Introduction to Topographical Maps: Definition, purpose, and importance of topographical maps. Key components: scale, grid system, and marginal information. 1.2 Map Reading Techniques: Identification of physical features (relief, drainage, vegetation). Identification of cultural features (settlements, roads, railways). 1.3 Scale and Distance Measurement: Types of scales: graphical, linear, and representative fraction. Calculating distances using scales. 1.4 Direction and Bearing: Understanding cardinal directions. Measuring and plotting bearings.	
	Module 2: Advanced Techniques in Topographical Map Interpretation (15 Lectures)	
	2.1 Contour Interpretation: Understanding contour lines and intervals. Identifying landforms: hills, valleys, plateaus, and depressions. 2.2 Cross-Section and Profile Drawing: Drawing cross-sections from contour lines. Interpreting relief features through profiles. 2.3 Drainage Patterns and Analysis: Types of drainage patterns: dendritic, trellis, radial, etc. Analyzing drainage systems on topographical maps. 2.4 Practical Applications of Map Interpretation: Land use planning and resource management. Disaster management and environmental studies.	

10	**Text Books:** 1. Singh, R.L. (1998). Elements of Practical Geography. Kalyani Publishers. 2. Ghosh, P. (2005). Practical Geography. Orient Blackswan. 3. Singh, R.L., and Singh, R.P.B. (1994). Map Work and Practical Geography. Central Book Depot.	
11	**Reference Books:** 1. Singh, R.L. (1998). Elements of Practical Geography. Kalyani Publishers. 2. Ghosh, P. (2005). Practical Geography. Orient Blackswan. 3. Sharma, J.P. (2010). Practical Geography. Rastogi Publications. 4. Majid Husain (2008). Fundamentals of Physical Geography. Rawat Publications. 5. Singh, R.L., and Singh, R.P.B. (1994). Map Work and Practical Geography. Central Book Depot. 6. Dasgupta, A. and Kapoor, A. (2001). Principles of Physical Geography. S. Chand & Co. 7. Mehta, P. (2014). Topographical Map Interpretation. Neelkamal Publications. 8. Sharma, M.L. (2006). Geography Through Maps. McGraw Hill Education. 9. Gopal Singh (2009). Map Work and Practical Geography. Vikas Publishing House. 10. Jaganathan, R. (2017). Topographic Map Analysis Made Easy. Allied Publishers. 11. Yadav, S. (2019). Fundamentals of Cartography. Pravalika Publications. 12. NCERT Textbooks for Geography (Classes XI & XII) – For foundational and practical understanding. 13. Monkhouse, F.J., and Wilkinson, H.R. (1971). Maps and Diagrams. Methuen & Co. Ltd. 14. Robinson, A.H. et al. (1995). Elements of Cartography. John Wiley & Sons. 15. Dent, B.D. (1999). Cartography: Thematic Map Design. McGraw-Hill. 16. Clarke, K.C. (2011). Maps and Web Mapping. ESRI Press. 17. Keates, J.S. (1996). Understanding Maps. Longman Scientific & Technical. 18. Imhof, E. (1982). Cartographic Relief Presentation. Walter de Gruyter. 19. Kraak, M.J., and Ormeling, F. (2003). Cartography: Visualization of Spatial Data. Prentice Hall. 20. Gregory, K.J., and Walling, D.E. (1980). Drainage Basin Form and Process. Edward Arnold. 21. MacEachren, A.M. (1995). How Maps Work: Representation, Visualization, and Design. Guilford Press.	
12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 20 Marks** 1. Assignment/Project work/Journal/Case study /Presentation /Seminar /Field visit report/Book review, etc., to be conducted in the given semester before the semester-end examination. (Marks – 10) 2. One online/ offline class test (Marks – 05) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing	**Semester-End Examination of 30 Marks** 1. This examination shall be of a 1-hour duration. Maximum marks 30. 2. There shall be two questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)

	environment-related activities (Marks – 05)	
14	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 & 2 (15 Marks) Q. 2. Based on Modules 3 & 4 (15 Marks)	

QUESTION PAPER PATTERN
(External and Internal)

For 4-Credit Courses

	Internal Continuous Assessment: 40%	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**
1	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 40 Marks** 1. Assignment/Project work/Journal/Case study /Presentation /Seminar /Field visit report/Book review, etc., to be conducted in the given semester before the semester-end examination. (Marks – 20) 2. One online/ offline class test (Marks – 10) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 10)	**Semester-End Examination of 60 Marks** 1. This examination shall be of a 2-hour duration. Maximum marks 60. 2. There shall be four questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)
2	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 (15 Marks) Q. 2. Based on Modules 2 (15 Marks) Q. 3. Based on Modules 3 (15 Marks) Q. 4. Based on Modules 4 (15 Marks)	

For 2-Credit Courses

	Internal Continuous Assessment: 40%	**External, Semester End Examination 60% Individual Passing in Internal and External Examination**

1	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments, etc. **Internal Continuous Assessment of 20 Marks** 1. Assignment/Project work/Journal/Case study /Presentation /Seminar /Field visit report/Book review, etc., to be conducted in the given semester before the semester-end examination. (Marks – 10) 2. One online/ offline class test (Marks – 05) 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks – 05)	**Semester-End Examination of 30 Marks** 1. This examination shall be of a 1-hour duration. Maximum marks 30. 2. There shall be two questions, each of 15 marks. 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)
2	**Format of Question Paper: for the semester-end examination** Q. 1. Based on Modules 1 & 2 (15 Marks) Q. 2. Based on Modules 3 & 4 (15 Marks)	

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

Sd/-

Sign of the BOS Chairman
Dr. Rajaram B. Patil
Board of Studies in Geography

Sd/-

Sign of the Offg. Associate Dean
Dr. C.A.Chakradeo
Faculty of Interdisciplinary Studies

Sd/-

Sign of the Offg. Associate Dean
Dr. Kunal Ingle
Faculty of Interdisciplinary Studies

Sd/-

Sign of the Offg. Dean
Prof. A. K. Singh
Faculty of Interdisciplinary Studies