#### K. C. E. Society's

# Moolji Jaitha College

An 'Autonomous College' Affiliated to K.B.C. North Maharashtra University, Jalgaon.

NAAC Reaccredited Grade - A (CGPA: 3.15 - 3<sup>rd</sup> Cycle) UGC honoured "College of Excellence" (2014-2019) DST(FIST) Assisted College



के. सी. ई. सोसायटीचे मूळजी जेठा महाविद्यालय

क.ब.चौ. उत्तर महाराष्ट्र विद्यापीठ, जळगाव संलग्नित 'स्वायत्त महाविद्यालय'

नॅकद्वारा पुनर्मानांकित श्रेणी -'ए'(सी.जी.पी.ए. : ३.१५ - तिसरी फेरी) विद्यापीठ अनुदान आयोगाद्वारा घोषित 'कॉलेज ऑफ एक्सलन्स' (२०१४-२०१९) डी.एस.टी. (फीस्ट) अंतर्गत अर्थसहाय्य प्राप्त

Date:- 01/08/2023

#### **NOTIFICATION**

Sub :- CBCS Syllabi of B.A. in Geography (Sem. I & II)

Ref.:- Decision of the Academic Council at its meeting held on 26/07/2023.

The Syllabi of B.A. in Geography (First and Second Semesters) as per **NATIONAL EDUCATION POLICY - 2020** and approved by the Academic Council as referred above are hereby notified for implementation with effect from the academic year 2023-24.

Copy of the Syllabi Shall be downloaded from the College Website (www.kcesmjcollege.in)

Sd/-Chairman, Board of Studies

#### To:

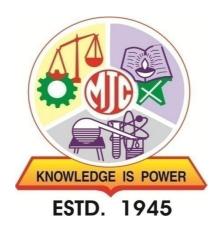
- 1) The Head of the Dept., M. J. College, Jalgaon.
- 2) The office of the COE, M. J. College, Jalgaon.
- 3) The office of the Registrar, M. J. College, Jalgaon.

Khandesh College Education Society's

# Moolji Jaitha College, Jalgaon

An "Autonomous College"

Affiliated to
Kavayitri Bahinabai Chaudhari
North Maharashtra University, Jalgaon-425001



### STRUCTURE AND SYLLABUS

# B.A. Honours / Honours with Research (F.Y.B.A. Geography)

Under Choice Based Credit System (CBCS) and as per NEP-2020 Guidelines

[w.e.f. Academic Year: 2023-24]

#### **Preface**

Geography, as a subject, is an ancient discipline that explores the interactions between humans and their environment. Over the years, geography has evolved and incorporated various technological advancements, leading to significant developments in the field. One such noteworthy transformation has been the integration of Remote Sensing (RS), Geographic Information Systems (GIS), and Global Positioning System (GPS) technologies. These cuttingedge tools have revolutionized how geographers collect, analyze, and interpret spatial data, making geography an even more dynamic and relevant subject in contemporary times.

The Department of Geography at M. J. College (Autonomous), Jalgaon, is at the forefront of embracing these recent trends in geography. Through the courses offered, including B.A. Geography, B.Sc. Geography, M.A/M.Sc. Geography, and Ph.D., the department equips students with comprehensive knowledge and practical skills to navigate the complexities of modern geography. Additionally, the Certificate Course in Geoinformatics serves as a valuable platform for students to delve deeper into the applications of RS, GIS, and GPS technologies.

One of the standout characteristics of the Department is its team of expert and qualified faculties. These educators not only possess extensive academic knowledge but also have hands-on experience in utilizing geospatial technologies effectively. Their guidance empowers students to explore and understand the intricacies of geographical phenomena using the latest tools and methodologies.

The Department boasts state-of-the-art facilities, including smart laboratories for practicals, a central library supplemented with a departmental library, and a well-equipped GIS computer lab with internet access. The availability of these resources ensures that students have ample opportunities to engage in hands-on learning and conduct research, contributing to a comprehensive understanding of geographic concepts. Moreover, the Department has been recognized as a research center for Ph.D. studies, encouraging scholarly pursuits in the realm of geography. This designation highlights the institution's commitment to pushing the boundaries of geographical knowledge and fostering innovative research in the field. The integration of technology in geography education is further augmented by the presence of smart classrooms and advanced geographical instruments. These resources enable interactive learning and support students in developing a deep appreciation for the spatial dimensions of various phenomena.

In addition to academic excellence, the Department is devoted to providing specialized coaching for national-level exams such as NET/SET and competitive examinations. This emphasis on exam preparation equips students with the necessary skills to excel in their careers and become leading professionals in the field of geography. The collaboration with the Indian Institute of Remote Sensing (IIRS) as an Outreach Training Program center is a testament to the Department's commitment to keeping abreast of the latest advancements in geospatial technology. This association allows students and faculties to participate in training programs conducted by experts in the field, enhancing their knowledge and skills in RS, GIS, and GPS applications. Furthermore, the Department of Geography at M. J. College (Autonomous), Jalgaon, proudly boasts access to the best telescopes for sky watching. This unique feature provides students with an opportunity to explore celestial phenomena and their connections with the Earth, bridging the gap between the terrestrial and astronomical realms.

Finally, the Department's focus on career opportunities in geography ensures that graduates are well-prepared to enter various professional fields. The interdisciplinary nature of

geography opens doors to careers in environmental management, urban planning, disaster management, cartography, geospatial analysis, and more. The versatility of geography as a subject makes it a rewarding and promising choice for students seeking diverse and impactful career paths.

The Department of Geography at M. J. College (Autonomous), Jalgaon, stands as a vibrant and progressive hub for geography education. The integration of RS, GIS, and GPS technologies, coupled with expert faculty, modern facilities, and extensive research opportunities, equips students to become adept geographers, ready to address the pressing challenges of our ever-changing world.

#### Programme Outcomes (PO) for B.A. Honours/ Honours with Research

Upon successful completion of this Programme, student will be able to:

PO No.	PO
1	Graduates should have a comprehensive knowledge and understanding of the fundamental principles, theories, and concepts in their chosen field of study.
2	Graduates should possess the necessary technical skills and competencies related to their discipline, including laboratory techniques and data analysis.
3	Graduates should be able to identify, analyze, and solve complex problems using logical and critical thinking skills. They should be able to apply scientific methods and principles to investigate and find solutions.
4	Graduates should be proficient in effectively communicating scientific information, both orally and in writing.
5	Graduates should have a basic foundation in research methods and be capable of designing and conducting scientific investigations.
6	Graduates should be able to work effectively as part of a team, demonstrating the ability to collaborate with others, respect diverse perspectives, and contribute to group projects.
7	Graduates should recognize the importance of ongoing learning and professional development. They should be equipped with the skills and motivation to engage in continuous learning, adapt to new technologies and advancements in their field, and stay updated with current research.

# Programme Specific Outcome (PSO) for B.A. Geography Honours / Honours with Research:

After completion of this course, students are expected to:

PSO No.	PSO
1	Understand the basic ideas and concept of physical and human aspect of Geography
2	Developing, analyzing and mapmaking based on the on the themes and issues of geography.
3	Principle and applications of geospatial techniques like Remote sensing GIS and GPS
4	Use traditional and advance geographical techniques like geospatial for surveying
5	Explain the causes and effects of change over space and time on physical and human environments
6	Improve tradition geographical knowledge along with advance contemporary skills like remote sensing and GIS.

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Sem- Semester, DSC- Department Specific Course, DSE- Department Specific Elective, T- Theory, P- Practical, CC-Cocurricular RM- Research Methodology, OJT- On Job Training, FP- Field Project, Int- Internship, RP- Research Project,

#### **Multiple Entry and Multiple Exit options:**

The multiple entry and exit options with the award of UG certificate/ UG diploma/ or three-year degree depending upon the number of credits secured;

Levels	Qualification Title	Credit Req	uirements	Semester	Year
		Minimum	Maximum		
4.5	UG Certificate	40	44	2	1
5.0	UG Diploma	80	88	4	2
5.5	Three Year Bachelor's Degree	120	132	6	3
6.0	Bachelor's Degree- Honours	160	176	8	4
	Or				
	Bachelor's Degree- Honours with				
	Research				

#### F. Y. B.A. Structure and Syllabus

Semester	Course Module	Credit	Hours/ week	TH/ PR	Code	Title
I	DSC	4	4	TH	GEOG-DSC-111	Fundamentals of Physical Geography
	DSC	2	4	PR	GEOG-DSC-112	Maps and Scale
	Minor	4	4	TH	GEOG-MIN-111	Fundamentals of Physical Geography
	SEC	2	2	TH	GEOG-SEC-111	Fundamentals of GPS
	SEC	1	2	PR	GEOG-SEC-112	Practicals on GPS
II	DSC	4	4	TH	GEOG-DSC-121	Fundamentals of Human Geography
	DSC	2	4	PR	GEOG-DSC-122	Interpretation of SOI topographical maps
	Minor	4	4	TH	GEOG-MIN-121	Fundamentals of Human Geography
	SEC	2	2	TH	GEOG-SEC-121	Surveying
	SEC	1	2	PR	GEOG-SEC-122	Plane-Table Survey

DSC	:	Department-Specific Core course	ENG	:	English
DSE	:	Department-Specific elective	ES	:	Environmental studies
GE/OE	:	Generic/ Open elective	CI	:	Constitution of India
SEC	:	Skill Enhancement Course	IKS	:	Indian Knowledge System
MIN	:	Minor course	CC	:	Co-curricular course
<b>AEC</b>	:	Ability Enhancement Course	TH	:	Theory
VEC	:	Value Education Courses	PR	:	Practical

# SEMESTER - I

#### F.Y.B.A. SEMESTER - I

#### **GEOG-DSC-111: Fundamentals of Physical Geography**

**Credits: 4 Total Hours: 60** Learning Understand physical geography concepts, branches, and importance. objectives Comprehend the formation of Earth's surface, including continental drift, plate tectonics, earthquakes, and volcanoes. Gain knowledge of rocks, weathering, erosion, and deposition processes. Acquire an understanding of the Earth's atmosphere, its composition, structure, and weather and climate concepts. Course After successful completion of this course, students are expected to: outcomes Demonstrate understanding and explain the significance of physical geography. Analyze geological processes and their impact on Earth's surface. Describe rocks and evaluate the processes shaping the Earth's surface. Analyze the Earth's atmosphere and understand weather and climate concepts. Unit **Topic Particular** Hours Introduction to Physical Geography • Definitions and scope of physical geography • Branches and subfields of physical geography Unit I 15 • Importance and relevance of physical geography • Earth as a system • Interior of earth structure Formation of Earth surface • Introduction to Major forces • Theory: Wegener's Continental Drift Theory, Plate Tectonics Theory Unit II • Earthquake and Volcano: Definitions, Causes, Effects and Types 15 Rocks: Definition, Types and Characteristics • Weathering, Mass movement and Erosion: Definition, Factors &Types • Erosional and Depositional Landforms: River and Wind Earth's Atmosphere Unit III • Definitions of Atmosphere 15 Concept of Weather & Climate • Composition and Structure of Atmosphere **Atmospheric Phenomena** Concept of Insolation, Solar Constant and Albedo of the Earth Distribution of Isolation-Unit IV o Factors Affecting on distribution of Insolation 15 Distribution of Temperature-Atmospheric Moisture Humidity Clouds- classification and Precipitation processes

References	B.S. Negi (1993) Physical Geography. S.J. Publication, Meerut
	• Christopherson, R. W., Birkeland, P. W., &Birkeland, P. W. (2015). Geosystems: An Introduction to Physical Geography
	<ul><li>(9th ed.). Pearson.</li><li>D.S. Lal (1998) Climatology. Chaitnya publishing house, Allahabad</li></ul>
	K. Siddhartha (2001) Atmosphere, Weather and Climate. Kisalaya publication, New Delhi
	<ul> <li>Marshak, S. (2016). Earth: Portrait of a Planet (5th ed.). W.</li> <li>W. Norton &amp; Company.</li> </ul>
	• McKnight, T. L., Hess, D., & Tasa, D. (2017). Physical Geography: A Landscape Appreciation (12th ed.). Pearson.
	R.N. Tikka (2002) Physical Geography. Kedarnath Ramnath & co, Meerut
	• Strahler, A. H., & Strahler, A. N. (2016). Introducing Physical Geography (6th ed.). Wiley.
	Willian D. Thornbury (1997) Principle of Geomorphology.     New Age International (PvtLtd.) New Delhi.

### F.Y.B.A. SEMESTER - I GEOG-DSC 112: Maps and Scale

Learning	<ul> <li>To acquaint the students with cartographic Techniques.</li> </ul>	
objectives	<ul> <li>To study importance of scale in map making.</li> </ul>	
	<ul> <li>To study various map making tools and techniques.</li> </ul>	
	<ul> <li>To understand Geographical data for map making</li> </ul>	
	After successful completion of this course, students are expected to:	
outcomes	<ul> <li>Students will have ability cartographic Techniques.</li> </ul>	
	<ul> <li>Understand importance implementation in map.</li> </ul>	
	<ul> <li>Able to handle map making tools and techniques</li> </ul>	
	Able to prepare map	
Unit	Topic Particular	Hours
	Map:	
	Maps and Globe: Meaning, Definition	
Unit I	Elements of Map	15
	Classification and Types of Map	
	Importance and use of maps	

	Scale	
	Definition of Scale	
	Methods of Representing Scales	
Unit II	Verbal scale	15
	Numerical scale	
	Graphical scale	
	<ul> <li>Conversion of scale (British and Metric system)</li> </ul>	
	Construction of Scale	
	Construction of Scales	
Unit III	<ul> <li>Simple Graphical Scale</li> </ul>	15
	Comparative Scale	
	<ul> <li>Time and Distance Scale (Only Metric System)</li> </ul>	
	Maps Making	
	Distributional Maps	
Unit IV	Dot Map	15
	Choropleth Map	
	Isopleths Map	
Study	• Pal S. K. (1998) Statistics for Geoscientists, Tata McGraw Hill, New	
Resources	Delhi.	
	<ul> <li>Negi B. S. (1993) Statistical Geography, Kedarnath Ramnath Co.,</li> </ul>	
	Meerut	
	• Dent B. D., 1999: Cartography: Thematic Map Design, (Vol. 1),	
	McGraw Hill.	
	• Gupta K. K and Tyagi V. C., 1992: Working with Maps, Survey of	
	India, DST New Delhi.	
	• Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography,	
	Concept Publishing.	
	Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers.	

#### F.Y.B.A. SEMESTER - I

#### **GEOG-MIN-111: Fundamentals of Physical Geography**

**Credits: 4 Total Hours: 60** Learning Understand physical geography concepts, branches, and importance. objectives Comprehend the formation of Earth's surface, including continental drift, plate tectonics, earthquakes, and volcanoes. Gain knowledge of rocks, weathering, erosion, and deposition processes. Acquire an understanding of the Earth's atmosphere, its composition, structure, and weather and climate concepts. Course After successful completion of this course, students are expected to: outcomes Demonstrate understanding and explain the significance of physical geography. Analyze geological processes and their impact on Earth's surface. Describe rocks and evaluate the processes shaping the Earth's surface. Analyze the Earth's atmosphere and understand weather and climate concepts. Unit **Topic Particular** Hours Introduction to Physical Geography • Definitions and scope of physical geography • Branches and subfields of physical geography Unit I 15 • Importance and relevance of physical geography • Earth as a system • Interior of earth structure Formation of Earth surface • Introduction to Major forces • Theory: Wegener's Continental Drift Theory, Plate Tectonics Theory Unit II • Earthquake and Volcano: Definitions, Causes, Effects and Types 15 Rocks: Definition, Types and Characteristics • Weathering, Mass movement and Erosion: Definition, Factors &Types • Erosional and Depositional Landforms: River and Wind Earth's Atmosphere Unit III • Definitions of Atmosphere 15 Concept of Weather & Climate • Composition and Structure of Atmosphere **Atmospheric Phenomena** Concept of Insolation, Solar Constant and Albedo of the Earth Distribution of Isolation-Unit IV o Factors Affecting on distribution of Insolation 15 Distribution of Temperature-Atmospheric Moisture Humidity Clouds- classification and Precipitation processes

#### References

- B.S. Negi (1993) Physical Geography. S.J. Publication, Meerut
- Christopherson, R. W., Birkeland, P. W., &Birkeland, P. W. (2015). Geosystems: An Introduction to Physical Geography (9th ed.). Pearson.
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- K. Siddhartha (2001) Atmosphere, Weather and Climate. Kisalaya publication, New Delhi
- Marshak, S. (2016). Earth: Portrait of a Planet (5th ed.). W.
   W. Norton & Company.
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- Willian D. Thornbury (1997) Principle of Geomorphology.
   New Age International (PvtLtd.) New Delhi.

#### F.Y.B.A. SEMESTER - I

# **GEOG-SEC 111: Fundamentals of GPS**

Learning	To you denote a describite existence	
objectives	To understand satellite system     To understand functional asymmetry of CDS.	
objectives	To understand functional segments of GPS  To an depart and the president in the segments of GPS	
	• To understand the navigation	
C	To understand accuracy and Applicability of GPS  After a second of the control of the contr	
Course outcomes	After successful completion of this course, students are expected to:	
outcomes	Will aware with satellite system	
	• understand functional segments of GPS	
	• know the navigation of GPS	
	Enhance to knowledge applications of GPS	
Unit	Topic Particular	Hours
	Introduction to GPS:	
Unit I	<ul> <li>Fundamental concepts of GPS</li> </ul>	8
Unit I	History of GPS development	0
	Fundamental concept	
	System and Function	
Unit II	Satellite system and GPS satellite	7
	<ul> <li>Functional segments of GPS</li> </ul>	,
	GPS satellite Segmentation	
	GPS working system and problems	
Unit III	GPS positioning types	8
	GPS receivers and codes, antenna	
	Factors affecting of GPS	
	Navigation signals	
	Accuracy and error sources	
Unit IV	Satellite based navigational systems:	7
	<ul> <li>GLONASS, GALILEO and IRNSS</li> </ul>	
	Applications of GPS	
Study	Understanding GPS: Principles and Applications Elliott Kaplan,	
Resources	Christopher Hegarty	
	GPS Mapping Rich Owings	
	GPS Made Easy: Using Global positioning Systems in the Outdoors	
	Lawrence Letham	
	Outdoor Navigation with GPS Stephen W. Hinch	
	Satellite Geodesy: Gunter Seebar, 8. GPS satellite surveying: Alfred	
	leick	
	• Longley, P. A., Goodchild, M. F., Maguire, D. J., Rhind, D. W.	
	(2002). Geographical Information Systems and Science. Chichester:	
	John Wiley & Sons Lo, C. P., Yeung, A. W. (2002). Concepts	
	Techniques of Geographical Information Systems. New Delhi:	
	Prentice-Hall of India.	
	• Chang, K. T. (2008). Introduction to Geographic Information	

- Systems. Avenue of the Americas, New York: McGraw-Hill.
- Korte, G. B. (2001). The GIS Book, Bangalore: Onward Press. 5. Demers, M. N. (2000). Fundamentals of Geographic Information Systems. New Delhi: John Wiley and Sons.
- Burrough, P. A. & McDonnell, R.A. (2000). Principles of Geographical Information Systems. New York: Oxford University Press.
- Heywood, I., Cornelisus, S., Carver, S. (2011). An Introduction to Geographical Information Systems, New Delhi: Pearson Education.
- Ahmed, E. L. Rabbany (2002). Introduction to Global Positioning Systems. Boston: Artech House

### **SEMESTER - I**

### **GEOG-SEC 112: Practicals on GPS**

Learning	To understand satellite system	
objectives	• To understand functional segments of GPS	
	To understand the navigation	
	To understand accuracy and Applicability of GPS	
Course	After successful completion of this course, students are expected to:	
outcomes	Will aware with satellite system	
	Able to handle GPS device	
	Able to captured waypoints	
	Able to apply of GPS in different applications	
Sr. No.	Topic Particular	Hours
	Introduction of GPS	
	• Understanding the basics of GPS technology.	
Unit I	• Components of a GPS system (satellites, receiver, and user)	8
	Satellite orbits and constellation.	
	Coordinate systems: latitude, longitude, and altitude	
	Basics of GPS	
	GPS accuracy and error sources.	
Unit II	Planning a GPS data collection project	7
	<ul> <li>Collecting GPS waypoints, tracks, and routes</li> </ul>	
	Importing and exporting GPS data	
	Analysis of GPS	
	• Data analysis using GIS software (e.g., Arc GIS, QGIS)	
Unit III	Mapping and visualizing GPS data	8
Omt III	• Integration of GPS data with Geographic Information Systems	0
	(GIS)	
	Mobile GPS	
	Applications of GPS	
Unit IV	<ul> <li>Creating GPS-based maps and layers</li> </ul>	7
Omt 1v	<ul> <li>Analyzing and interpreting GPS data within GIS</li> </ul>	/
	GPS applications in various fields.	
Study	• Parkinson, B. W., & Spilker Jr, J. J. (1996). Global Positioning	
Resources	System: Theory and Applications (Vol. I). American Institute of	
	Aeronautics and Astronautics.	
	Hofmann-Wellenhof, B., Lichtenegger, H., & Collins, J. (2007).	
	Global Positioning System: Theory and Practice. Springer.	
	• Leick, A. (2004). GPS Satellite Surveying (3rd ed.). Wiley.	
	• Rizos, C., & Willis, P. (Eds.). (2013). Encyclopedia of Geodesy	
	(Vol. 1). Springer.	
	• Li, X., & Rizos, C. (Eds.). (2017). Handbook of Satellite	
	Navigation and Global Positioning System. Springer.	
	• Dana, P. H., & Hsu, L. T. (2009). GPS for Land Surveyors (3rd	
	ed.). CRC Press.	

# SEMESTER – II

### **SEMESTER - II**

# **GEOG-DSC-121: Fundamentals of Human Geography**

Learning	To understand the relationship of human and geography	
objectives	To make the student aware of the major race of mankind	
	To acquaint variation in world religions	
	To understand the various primitive life in the world	
Course	After successful completion of this course, students are expected to:	
outcomes	Aware of historical developments and contributions of various piones	
	How the subject emerges as a sub branch of human geography and its	s current
	scope	
	Know the diversity of world religion in a view of geography  Understand the rules applied for tribal life.	
Unit	Understand the rules applied for tribal life     Topic Particular	Hours
	-	110015
	Introduction	
	Definitions, Nature and Scope of Human Geography.	
	Branches of Human Geography	
Unit I	Approaches to the study of Human Geography	15
	Man & Environmental Relationship	
	Determinism and Possibilism	
	Stop and Go Determinism	
	The Race of Mankind	
	Meaning and definition of race	
T TT	Physical basis of Racial groups	1.5
Unit II	Classification of World Races (Caucasoid, Mongoloid, Negroid,	15
	Australoid)	
	Ethnic groups in India.	
	Religion and Languages	
	Universalizing Religions & their distribution	
	o Christianity,	
	o Islam,	
	o Buddhism.	
Unit III	Ethnic Religions	15
	O Hinduism,	
	Shintoism,	
	<ul><li>Judaism.</li></ul>	
	<ul> <li>Major Languages in India and their distribution</li> </ul>	
	Tribals Life	
Unit IV	• Tribes	15
	o Eskimos	
	o Budaun	

	o Masai
	o Gond
	o Naga
	o Bhils
	Food Gatherers
Study	Hartshorne, T. A., & Alexander, J. W. (2010). Economic Geography.
Resources	New Delhi: PHI Learning.
	• Lloyd, P., & Dicken, B. (1972). Location in Space: A Theoretical
	Approach to Economic Geography. New York: Harper and Row.
	• Siddhartha, K. (2000). Economic Geography: Theories, Process and
	Patterns, New Delhi: Kisalaya Publications.
	• Husain, M. (2002). Human Geography, New Delhi: Rawat
	Publication.

### F.Y.B.A. SEMESTER - II

# **GEOG-DSC-122: Interpretation of SOI topographical maps**

Learning	To Study basic principles topographical Topographic features of the study basic principles topographic features of the study basic principles topographical Topographic features of the study basic principles topographical Top	ne Earth
objectives	Surface	
	To develop the interpretative skill of student	
	To understand the map element of maps	
	To understand culture, communication and development of region	
Course	After successful completion of this course, students are expected to:	
outcomes	Able to understand Topographic features of the Earth Surface	
	Able to understand and interpret map	
	Aware of different elements of map.	
	Know the basic terminology used to describe physical processes and	
	landscape forms.	
Unit	Topic Particular	Hours
	Introduction to SOI topographical map	
	Types of topographical maps	
Unit I	• Index numbers (international world map series)	15
	Grid and Grid reference system	
	Four figure & six figure grid	
	Convectional signs and symbols	
Unit II	Contour patterns	15
	Relief represented by contour	
Unit III	Interpretation of topographical maps of Plain, Plateau and Mountainous desert Regions	15

	<ul><li>Physical features:</li><li>Physiography</li></ul>	
	o Drainage	
	Natural vegetation	
	Interpretation of topographical maps of Plain, Plateau and	
	Mountainous desert Regions	
Unit IV	<ul><li>Cultural features:</li><li>Settlement</li></ul>	15
	<ul> <li>Transportation and communication</li> <li>Agriculture</li> </ul>	
Study	• Arjun,K. (2000). PratyakshikBhugol.SumeruPrakashan,	
Resources	Dombivali.	
	• Ahirrao, D. Y. & Karanjkhele, E. K. (2002).	
	PratyakshikBhugolSudhershanPrakashan, Nashik.	
	• Singh, G. (2008). Map work and practical geography. Vikas	
	Publishing House pvt.ltd, New Delhi. Mishra,	
	• R. P. and Ramesh, A. (1986). Fundamental of Geography. Concept	
	publication, New Delhi.	
	• Singh, R. L. and Kanauja, (1970). Map work and practical	
	geography.Central book depot, Alahabad.	

### **SEMESTER - II**

# **GEOG-MIN-121: Fundamentals of Human Geography**

Learning	To understand the relationship of human and geography	
objectives	To make the student aware of the major race of mankind	
	To acquaint variation in world religions	
	To understand the various primitive life in the world	
Course	After successful completion of this course, students are expected to:	
outcomes	Aware of historical developments and contributions of various piones	
	How the subject emerges as a sub branch of human geography and its	s current
	scope	
	Know the diversity of world religion in a view of geography  Understand the rules applied for tribal life.	
Unit	Understand the rules applied for tribal life     Topic Particular	Hours
	-	110015
	Introduction	
	Definitions, Nature and Scope of Human Geography.	
	Branches of Human Geography	
Unit I	Approaches to the study of Human Geography	15
	Man & Environmental Relationship	
	Determinism and Possibilism	
	Stop and Go Determinism	
	The Race of Mankind	
	Meaning and definition of race	
T TT	Physical basis of Racial groups	1.5
Unit II	Classification of World Races (Caucasoid, Mongoloid, Negroid,	15
	Australoid)	
	Ethnic groups in India.	
	Religion and Languages	
	Universalizing Religions & their distribution	
	o Christianity,	
	o Islam,	
	o Buddhism.	
Unit III	Ethnic Religions	15
	O Hinduism,	
	o Shintoism,	
	<ul><li>Judaism.</li></ul>	
	Major Languages in India and their distribution	
	Tribals Life	
	• Tribes	
Unit IV	P. 1.	15
	o Budaun	

	o Masai
	o Gond
	o Naga
	o Bhils
	Food Gatherers
Study	Hartshorne, T. A., & Alexander, J. W. (2010). Economic Geography.
Resources	New Delhi: PHI Learning.
	• Lloyd, P., & Dicken, B. (1972). Location in Space: A Theoretical
	Approach to Economic Geography. New York: Harper and Row.
	• Siddhartha, K. (2000). Economic Geography: Theories, Process and
	Patterns, New Delhi: Kisalaya Publications.
	• Husain, M. (2002). Human Geography, New Delhi: Rawat
	Publication.

### F.Y.B.A. SEMESTER - II

**GEOG**–SEC-121: Surveying

Learning	To know the types of surveying.	
objectives	To study mechanism of surveying instrument.	
	To give knowledge with appropriate method of survey and instrument	
	according to study and area	
	To enhance surveying skill.	
Course	After successful completion of this course, students are expected to:	
outcomes	Will Understand the procedure of surveying	
	Able to handle of surveying instruments.	
	Know the skills to use of appropriate method of survey and instrume	nt
	according to study and area	
	Understand various purpose of surveying.	
Unit	Topic Particular	Hours
	Introduction to surveying	
Unit I	Definitions of Surveying	8
	Principle of Surveying	O
	Methods of Surveying	
	Type of surveying, surveying instruments and procedure	
Unit II	• Chain and tape	7
	Plane table survey	
	Classification of surveying	
** ** ***	According to area	0
Unit III	According to objectives	8
	<ul><li>According to Surveying instruments</li><li>According to Methods of survey</li></ul>	
	Leveling surveying	
	Fundamental concept	
	Dumpy level: structure adjustment	
Unit IV	Field book	7
	Surveying Method of dumpy level	
	Rise and fall	
	o Collimation	
Study Resources	Bygott, J. (1955). Map work and Practical Geography.5th  Edition University Tytograph Practs Landar  The desired Practical Geography.5th  Output  Description of the description of	
Resources	Edition, University Tutorial Press, London.	
	• Davis, R.E. and Foote, F.S. (1953). Surveying, McGraw-Hill Book Co., New York.	
	<ul> <li>Deshpande, G.B. (1991). Surveying, Everest Publishing House,</li> </ul>	
	Pune Pune	
	• Kanetkar T.P. and Kulkarni S.V. (1983). Surveying and	
	Levelling (Part I and II), Vidyarthi Gruha Prakashan, Pune.	
	• Mishra, R.P, and Ramesh A. (2000). Fundamental of	

- Cartography, Concept Publishing, Company, New Delhi.
- Monkhouse, F.X.J. & Diagrams, B.I Publications, Bombay.
- Robinson, A.H. & Deep, R.D. (1969). Elements of Practical Geography, John Wileypublications, New York.
- Singh Gopal (1996). Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd.,New Delhi.
- Singh, Lekhraj& Singh R. (1973). Map work and Practical, Central Book Depot. Allahabad.
- Singh, R.C., and Dutta (1993). Elements of Practical Geography, Kalyani Publications, NewDelhi.
- Singh, R.L., and Kanaujia L.R.S. (1963). Map Work and Practical Geography, Central BookDepot, Allahabad.
- Singh, R.L., and Singh, R.P.B. (1997). Elements of Practical Geography, Kalyani Publishers, New Delhi.

#### **SEMESTER - II**

# **GEOG-SEC-122: Plane-Table Survey**

Learning objectives			
objectives	surveying.		
	To provide basic information about mechanism of survey instrum	nents.	
	To know the scale and distance of surveying.		
	• To acquaint the students with basic knowledge and technique of a	ground	
	survey.		
Course	fter successful completion of this course, students are expected to:		
outcomes	Able to understand of survey language and sense of technique of surveying		
	• Understand mechanism of survey instruments.		
	Able to know the scale and distance of surveying.		
	Enhance knowledge and technique of ground survey.		
Unit	Topic Particular	Hours	
	• Elements and Equipment's of Plane Table Survey:		
	The plane table with a tripod stand		
	o Alidade		
	O Chain or Tape		
Unit I	<ul><li>Spirit level</li><li>Trough Compass</li></ul>	8	
	<ul><li>o Trough Compass</li><li>o Ranging Rods</li></ul>		
	<ul><li>Plumb bob</li></ul>		
	<ul> <li>Drawing essential: Paper, pencil, rubber,</li> </ul>		
	o drawing pins, pencil, sharpener, scale etc.		
Unit II	Methods of Plane Table Survey:	7	
Unit II	o Radiation Method	/	
	Methods of Plane Table Survey:		
Unit III	<ul> <li>Intersection Method</li> </ul>	8	
	o Traverse Method		
T7 .*4 TX7	Advantages and Disadvantages of Plane Table Survey	7	
Unit IV	• Actual Measurement of Piece of Land (Each one)	/	
Study	Monkhouse, F.X.J. & Wilkinson, H.R. (1971): Maps & Diagrams	s. London	
Resources		,	
	• Mishra, R.P and Ramesh A. (2000): Fundamental of Cartography	, Concept	
	Publishing Company, New Delhi.	-	
	• Robinson, A.H. & Sleep, R.D. (1969): Elements of Practical Geo	graphy. New	
	York, John Wiely		
	• Singh Gopal (1996): Map Work and Practical Geography, Vikas	Publishing	
	House Pvt. Ltd., New Delhi		
	• Singh, Lekhraj & Singh Raghunandan (1973): Map work and Pra	icticl, Central	
	Book Deopt. Allahabad		

- Singh, R.L. and Singh, R.P.B. (1997): Elements of Practical Geography, Kalyani Publishers, New Delhi.
- Sing, R.L.& Kanaujia L.R.S.(1963): Map Work and Practical Geography, Allahabad Central Book Depot
- Gopal Sing (1973): Map work and Practical Geography, Vikas Publication, Ravindra Mansion, Ram Nagar, New Delhi-110055
- Dr. D. Y. Ahirrao and Dr. E. K. Karanjkhele, (2002): Pratyakshik Bhugol, Sudarshan Nashik
- T. P. Kanetkar and S. V. Kulkarni, (1986): Surveying and Leveling, Pune Vidyrthi Griha Prakashan –Pune