



Date :- 25/04/2025

NOTIFICATION

Sub :- CBCS Syllabi of B. A. in Geography (Sem. III & VI)

Ref. :- Decision of the Academic Council at its meeting held on 22/04/2025.

The Syllabi of B. A. in Geography (Third and Fourth Semesters) as per **NATIONAL EDUCATION POLICY – 2020 (2024 Pattern)** and approved by the Academic Council as referred above are hereby notified for implementation with effect from the academic year 2025-26.

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

Sd/-
Chairman,
Board of Studies

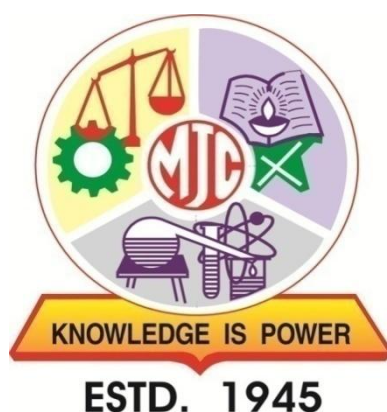
To :

- 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.

Knowledge is Power

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
(S.Y.B.A./S.Y.B.Com/S.Y.B.Sc. Geography)

(Major (DSC), Minor, SEC, OE, CEP/FP)

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

[w.e.f. Academic Year:2025-26]

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 cutting-edge 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 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.

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 Requirements		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-Honors Or Bachelor's Degree-Honours with Research	160	176	8	4

NHEQF level	Examples of higher education qualifications located within each level
Level 4.5	Undergraduate Certificate. Programme duration: First year (first two semesters) of the undergraduate programme, followed by an exit 4-credit skills-enhancement course(s).
Level 5	Undergraduate Diploma. Programme duration: First two years (first four semesters) of the undergraduate programme, followed by an exit 4-credit skills-enhancement course(s) lasting two months.
Level 5.5	Bachelor's Degree. Programme duration: First three years (Six semesters) of the four-year undergraduate programme.
Level 6	Bachelor's Degree (Honours/ Honours with Research). Programme duration: Four years (eight semesters).
Level 6	Post-Graduate Diploma. Programme duration: One year (two semesters) for those who exit after successful completion of the first year (two semesters) of the 2-year master's programme.

Department of Geography
S.Y.B.A. Structure as per NEP 2020
w.e.f. 2025-26

Semester III					
Course Module	Credit	Hours/ week	TH/ PR	Code	Title
DSC	4	4	TH	GEOG-DSC-231	Physical Geography: Lithosphere
DSC	2	4	PR	GEOG-DSC-232	Practical on SOI Topographical Map
MIN	4	4	TH	GEOG-MIN-231	Physical Geography: Lithosphere
MIN	2	4	PR	GEOG-MIN-232	Practical on SOI Topographical Map
SEC	2	2	TH	GEOG-SEC-231	Fundamental of GPS
OE*	2	2	TH	GEOG-OE-231	Air Pollution
CEP	2	4	PR	GEOG-CEP-231	Community Engagement Programme
Semester IV					
Course Module	Credit	Hours/ week	TH/ PR	Code	Title
DSC	4	4	TH	GEOG-DSC-241	Physical Geography: Atmosphere
DSC	2	4	PR	GEOG-DSC-242	Practical on IMD Weather Maps
MIN	4	4	TH	GEOG-MIN-241	Physical Geography: Atmosphere
SEC	2	2	TH	GEOG-SEC-241	Weather Forecasting
SEC	2	4	PR	GEOG-SEC-242	Practical on Weather Forecasting
OE*	2	2	TH	GEOG -OE-241	Tourism Geography
FP	2	4	PR	GEOG-FP-241	Field Project

*** For Commerce and Science Faculty only.**

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

Semester III

S.Y. B.A. (Geography)
Semester-III
GEOG-DSC-231: Physical Geography: Lithosphere

Credit: 4

Internal Examination: 40

Marks: 100

External Examination: 60

Course Objectives	▪ To understand the structure, composition, and distribution of land and water on Earth. ▪ To explore the types, characteristics, and significance of rocks and minerals, along with key geological theories. ▪ To analyze the impact of slow and sudden movements on Earth's surface. ▪ To understand the processes of weathering and mass movement and their role in shaping Earth's surface.	
Course Outcomes	After successful completion of this course, students are expected to: ▪ Describe the Earth's interior structure and explain the distribution of oceans and continents. ▪ Differentiate between various rock types and explain the Continental Drift and Plate Tectonics theories with their supporting evidence and criticisms. ▪ Explain the processes of folding and faulting, as well as the causes and effects of earthquakes and volcanoes. ▪ Identify different types of weathering and mass movements and explain their contributing factors.	
Unit	Contents	Hours
Unit I	Introduction to Lithosphere ▪ Definitions, meaning and concept ▪ Interior of the earth-structure and composition ▪ Salient features of distribution of oceans and Land	15
Unit II	Rocks, Minerals and Theories ▪ Rocks and Minerals ▪ Definition, Types, Characteristics, Economics Importance continents ▪ Theories Regarding the present distribution of land & water ▪ Wegener's Continental Drift Theory-Description, Evidences & Criticism. ▪ Theory of Plate Tectonics Description & Criticism.	15
Unit III	Earth's Moments ▪ Slow moments, i) Diastrophic Forces – Eperiogenetic and Orogenetic Forces. a. Folds- Definitions, types and landforms associated with folds b. Faults- Definitions, types and landforms associated with faults ▪ Sudden moments - a. Earthquake- Definition, Causes, effects and preventive measures b. Volcano- Definition, Causes, effects and types	15

Unit IV	Weathering and Mass Movement ▪ Weathering: Definition, Factors, Types ▪ Mass Movement: Definition, Factors, Types	15
Study Resources	▪ Ahirrao, W.R., Alizad, S.S. and Dhapte, C.S., 1998. Morphology and Landscape, NiraliPrakashan, Pune ▪ Bloom, A.L., 1998. Geomorphology. A Systematic Analysis of Late Cenozoic Landforms. Pearson Education (Singapore) Pte. Ltd. ▪ Chaudhari S.R., V.J. Patil & Arvind Badgujar (2014) : Physical Geography Prashant Publication, Jalgaon ▪ Chorley R. J. (ed.), 1972: Spatial Analysis in Geomorphology, Harper and Row. Christopher son, R.W. 2000, Geo-systems, Prentice Hall, INC. USA ▪ Hamblin, W.K., 1989. The Earth's Dynamic Systems, Macmillan Publishing Company, New York. ▪ Husain, M., 2001. Fundamentals of Physical Geography, Rawat Publication, Jaipur. ▪ Kale, V.S. and Gupta, A., 2001. Introduction to Geomorphology, Orient Longman, Calcutta. ▪ Monkhouse, F.J., 1996. Principles of Physical Geography, Hodder and Stoughton, London. ▪ S. N. Bharambe, S. V. Dhake, V. J. Patil, Physical Geography – Part 1 (Lithosphere), Prashant Publication, Jalgaon ▪ Strahler A. H., 2008: Modern Physical Geography (4 Edition), Wile 11. Singh, Savindra: Physical Geography (Eng./Hindi) ▪ Suryawanshi D.S., & Others, 2011. Geography (Lithosphere & Hydrosphere), Vrinda publication, Jalgaon ▪ Trewartha, G.T: Elements of Physical Geography) McGraw Hill	

S.Y. B.A. (Geography)
Semester-III
GEOG-DSC-232: Practical on SOI Topographical Maps
(12 students per batch and 4 Hours per week per Batch)

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Learning objectives	▪ To introduce students to the origin, role, and functions of the Survey of India (SOI). ▪ To familiarize students with different types of topographical maps and how to interpret grid references. ▪ To help students recognize and understand the conventional signs, symbols, and contour patterns used in topographical maps. ▪ To develop skills in interpreting physical features and landforms from topographical maps.	
Course outcomes	After successful completion of this course, students are expected to: ▪ Explain the history, purpose, and various products offered by the Survey of India. ▪ Identify types of topographical maps and accurately use four-figure and six-figure grid references. ▪ Interpret various signs and contour patterns to analyze geographical features on a map. ▪ Interpret and differentiate between plains, plateaus, and mountainous regions using map data.	
Unit	Contents	Hours
Unit I	Introduction to Survey of India ▪ About SOI ▪ History ▪ Products	15
Unit II	Introduction to topographical maps ▪ Types of topographical maps ▪ Index numbers (international world map series) ▪ Grid reference ▪ Four figure & Six figure grid	15
Unit III	Signs and symbols of topographical maps ▪ Convectional signs and symbols ▪ Contour patterns	15
Unit IV	Interpretation of topographical maps ▪ Plain region. ▪ Plateau region ▪ Mountainous region	15
Study Resources	▪ Arjun, K. (2000). Pratyakshik Bhugol Sumeru Prakashan, Dombivali. ▪ Ahirrao, D. Y & Karanjkehe, E. K. (2002). Pratyakshik Bhugol Sudhershnan Prakashan, 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, Allahabad.	

Examination and Evaluation

Sr. No.	Particulars	Internal Marks	External Marks
01	Journal and Viva-voce	05	05
02	Class Practical performance	05	00
03	Practical Examination	10	25

S.Y. B.A. (Geography)
Semester-III
GEOG-MIN-231: Physical Geography: Lithosphere

Credit: 4

Internal Examination: 40

Marks: 100

External Examination: 60

Course Objectives	▪ To understand the structure, composition, and distribution of land and water on Earth. ▪ To explore the types, characteristics, and significance of rocks and minerals, along with key geological theories. ▪ To analyze the impact of slow and sudden movements on Earth's surface. ▪ To understand the processes of weathering and mass movement and their role in shaping Earth's surface.	
Course Outcomes	After successful completion of this course, students are expected to: ▪ Understand the Earth's interior structure and explain the distribution of oceans and continents. ▪ Differentiate between various rock types and explain the Continental Drift and Plate Tectonics theories with their supporting evidence and criticisms. ▪ Explain the processes of folding and faulting, as well as the causes and effects of earthquakes and volcanoes. ▪ Identify different types of weathering and mass movements and explain their contributing factors.	
Unit	Contents	Hours
Unit I	Introduction to Lithosphere ▪ Definitions, meaning and concept ▪ Interior of the earth-structure and composition ▪ Salient features of distribution of oceans and Land	15
Unit II	Rocks ,Minerals and Theories ▪ Rocks and Minerals ▪ Definition, Types, Characteristics, Economics Importance continents ▪ Theories Regarding the present distribution of land & water ▪ Wegener's Continental Drift Theory-Description, Evidences & Criticism. ▪ Theory of Plate Tectonics Description & Criticism.	15
Unit III	Earth's Moments ▪ Slow moments, i) Diastrophic Forces – Eperiogenetic and Orogenetic Forces. a. Folds- Definitions, types and landforms associated with folds b. Faults- Definitions, types and landforms associated with faults ▪ Sudden moments - a. Earthquake- Definition, Causes, effects and preventive measures b. Volcano- Definition, Causes, effects and types	15

Unit IV	Weathering and Mass Movement ▪ Weathering: Definition, Factors, Types ▪ Mass Movement: Definition, Factors, Types	15
Study Resources	▪ Ahirrao, W.R., Alizad, S.S. and Dhapte, C.S., 1998. Morphology and Landscape, NiraliPrakashan, Pune ▪ Bloom, A.L., 1998. Geomorphology. A Systematic Analysis of Late Cenozoic Landforms. Pearson Education (Singapore) Pte. Ltd. ▪ Chaudhari S.R., V.J. Patil & Arvind Badgujar (2014) : Physical Geography Prashant Publication, Jalgaon ▪ Chorley R. J. (ed.), 1972: Spatial Analysis in Geomorphology, Harper and Row. Christopher son, R.W. 2000, Geo-systems, Prentice Hall, INC. USA ▪ Hamblin, W.K., 1989. The Earth's Dynamic Systems, Macmillan Publishing Company, New York. ▪ Husain, M., 2001. Fundamentals of Physical Geography, Rawat Publication, Jaipur. ▪ Kale, V.S. and Gupta, A., 2001. Introduction to Geomorphology, Orient Longman, Calcutta. ▪ Monkhouse, F.J., 1996. Principles of Physical Geography, Hodder and Stoughton, London. ▪ S. N. Bharambe, S. V. Dhake, V. J. Patil, Physical Geography – Part 1 (Lithosphere), Prashant Publication, Jalgaon ▪ Strahler A. H., 2008: Modern Physical Geography (4 Edition), Wile 11. Singh, Savindra : Physical Geography (Eng./Hindi) ▪ Suryawanshi D.S., & Others, 2011. Geography (Lithosphere & Hydrosphere), Vrindapublication, Jalgaon ▪ Trewartha, G.T: Elements of Physical Geography) McGraw Hill	

S.Y. B.A. (Geography)
Semester-III
GEOG-MIN-232: Practical on SOI Topographical Maps
(12 students per batch and 4 Hours per week per Batch)

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Learning objectives	▪ To introduce students to the origin, role, and functions of the Survey of India (SOI). ▪ To familiarize students with different types of topographical maps and how to interpret grid references. ▪ To help students recognize and understand the conventional signs, symbols, and contour patterns used in topographical maps. ▪ To develop skills in interpreting physical features and landforms from topographical maps.	
Course outcomes	After successful completion of this course, students are expected to: ▪ Explain the history, purpose, and various products offered by the Survey of India. ▪ Identify types of topographical maps and accurately use four-figure and six-figure grid references. ▪ Interpret various signs and contour patterns to analyze geographical features on a map. ▪ Interpret and differentiate between plains, plateaus, and mountainous regions using map data.	
Unit	Contents	Hours
Unit I	Introduction to Survey of India ▪ About SOI ▪ History ▪ Products	15
Unit II	Introduction to topographical maps ▪ Types of topographical maps ▪ Index numbers (international world map series) ▪ Grid reference ▪ Four figure & Six figure grid	15
Unit III	Signs and symbols of topographical maps ▪ Convectional signs and symbols ▪ Contour patterns	15
Unit IV	Interpretation of topographical maps ▪ Plain region. ▪ Plateau region ▪ Mountainous region	15
Study Resources	▪ Arjun, K. (2000). Pratyakshik Bhugol Sumeru Prakashan, Dombivali. ▪ Ahirrao, D. Y & Karanjkehe, E. K. (2002). Pratyakshik Bhugol Sudhershnan Prakashan, 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, Allahabad.	

Examination and Evaluation

Sr. No.	Particulars	Internal Marks	External Marks
01	Journal and Viva-voce	05	05
02	Class Practical performance	05	00
03	Practical Examination	10	25

S.Y. B.A. (Geography)
Semester-III
GEOG-SEC-231: Fundamental of GPS

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Learning objectives	- To introduce the fundamental concepts of GPS - To Introduce the functional structure of the GPS system - To provide knowledge on various GPS services, the factors affecting GPS accuracy, common errors, and practical applications across fields - To introduce students to the different types of GPS and various global navigation satellite systems used worldwide.	
Course outcomes	After successful completion of this course, students are expected to: - Define GPS, describe its historical evolution - Describe the GPS segments, signal and used to determine accurate position and time. - Evaluate GPS accuracy, identify sources of errors, and demonstrate an understanding of its diverse real-world applications. - Differentiate between various global navigation systems and understand their characteristics.	
Unit	Topic Particular	Hours
Unit I	Introduction - Definition and concept of GPS - History of GPS - GPS Hardware Components? - Basic Concept of GPS Coordinate Systems, Elevation and mean sea level	8
Unit II	Work system - GPS Segments - GPS satellite signals - Position and time from GPS	6
Unit III	GPS Data Collection and Handling - Types of data collected by GPS: coordinates (latitude, longitude, altitude), time - Use of handheld GPS devices and mobile GPS apps - Data formats: Waypoints, Tracks, Routes - Transfer of GPS data to computers; use of software for visualization (e.g., Google Earth) - Uses of GPS	8
Unit IV	Type and World System - Type of GPS - World GPS Systems - GPS(U.S.) - GLONASS - Galileo	8

	○ BeiDou (BDS) ○ QZSS (Quasi-Zenith Satellite System) ○ IRNSS	
Study Resources	● Bhatta, B. (2010). Remote Sensing and GIS. Oxford University Press. ● Campbell, J. (2002). Introduction to Remote Sensing. Taylor and Francis. ● Agarwal, C. S. & Garg, P. K. (2000). Remote Sensing in Natural Resource Monitoring and Management. ● Gopi, S. (2005). GPS Principles and Applications. Tata McGraw-Hill. ● डॉ.परमेश्वर पौल आणि डॉ. बालाजी आव्हाड: भौगोलिक माहिती प्रणाली, विद्या बुक्स पब्लिशर्स	

S.Y.B.Com /S.Y. B.Sc. (Geography)
Semester-III
GEOG-OE-231: Air Pollution

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Learning objectives	▪ To understand the definition, sources, and types of air pollution. ▪ To analyze the causes and effects of air pollution on health and the environment. ▪ To explore mitigation strategies, regulations, and technological solutions. ▪ To study case studies, global efforts, and future trends in air pollution control.	
Course outcomes	After successful completion of this course, students are expected to: ▪ Explain key concepts, sources, and impacts of air pollution. ▪ Assess health and environmental effects of major pollutants. ▪ Evaluate air pollution control measures and policies. ▪ Analyze case studies and propose sustainable solutions.	
Unit	Contents	Hours
Unit I	Introduction to Air Pollution ▪ Definition and scope of air pollution ▪ Sources of air pollution: natural and anthropogenic ▪ Major air pollutants: particulate matter, carbon monoxide, sulfur dioxide, nitrogen oxides, ozone, etc. ▪ Health and environmental impacts of air pollution	8
Unit II	Types and Causes of Air Pollution ▪ Different types of air pollution: outdoor and indoor ▪ Industrial pollution and emissions from power plants ▪ Vehicle emissions and transportation-related pollution ▪ Agricultural practices and air pollution ▪ Household pollution and its sources	6
Unit III	Impacts and Mitigation of Air Pollution ▪ Health effects of air pollution on humans: respiratory diseases, cardiovascular issues, etc. ▪ Environmental impacts: ecosystem degradation, acid rain, ozone depletion, etc. ▪ Air pollution control measures: legislation and regulations ▪ Technological solutions for reducing emissions ▪ Renewable energy alternatives and their role in mitigating air pollution ▪ Personal and community-level actions to reduce air pollution	8
Unit IV	Case Studies and Future Perspectives ▪ Case studies of significant air pollution incidents and their consequences ▪ Urban air pollution and its unique challenges ▪ International efforts and agreements to combat air pollution ▪ Emerging technologies and innovations for air pollution control ▪ The importance of public awareness and education in addressing air	8

	pollution ▪ Future trends and prospects in air pollution management	
Study Resources	• Seinfeld, J. H., & Pandis, S. N. (2016). Atmospheric chemistry and physics: From air pollution to climate change (3rd ed.). Wiley. • Jacobson, M. Z. (2012). Atmospheric pollution: History, science, and regulation. Cambridge University Press. • Harrison, R. M., & Hester, R. E. (Eds.). (2013), Air pollution: Sources, impacts and controls. Royal Society of Chemistry. • Dockery, D. W., & Pope, C. A. (Eds.). (2018), Air pollution and health (2nd ed.). Elsevier. • Rao, S. T., & Rao, S. T. (2014), Air pollution. CRC Press. • Fitzgerald, J. W. (2014), Air pollution and forest decline: Lessons learned from 30 years of research. Springer. • Vallero, D. A. (2014), Fundamentals of air pollution (5th ed.). Academic Press. • Kampa, M., & Castanas, E. (Eds.). (2013), Human exposure to pollutants via dermal absorption and inhalation. Springer. • Goudie, A. S. (2014), The human impact on the natural environment: Past, present, and future (7th ed.). Wiley. • Stohl, A. (2013), Atmospheric transport and chemistry in the anthropocene. Springer.	

S.Y. B.A. (Geography)
Semester-III
GEOG-CEP-231: Community Engagement Program

Credit: 2

Marks: 50

Guidelines for CEP & FP

In alignment with the National Education Policy (NEP) 2020, Moolji Jaitha College (Autonomous), Jalgaon is introducing the Community Engagement Program and Field Project at the undergraduate level. The NEP 2020 emphasizes holistic development, inclusivity, and integrating vocational education with academic learning, aiming to nurture socially responsible individuals. This course fosters a strong connection between education and real-world applications. We believe that experiential learning, community involvement, and fieldwork are essential components of a well-rounded education. These initiatives aim to bridge the gap between theoretical knowledge and practical experience, helping students develop critical thinking, problem-solving skills, and a sense of civic responsibility. Additionally, students will learn about the challenges faced by vulnerable households and appreciate local wisdom and lifestyles.

Inspired by NEP 2020, the Community Engagement Program and Field Project aim to produce knowledgeable, compassionate, and proactive graduates, contributing to a more just, equitable, and sustainable society.

Objectives

- Engage students in activities that foster emotional, social, and intellectual growth, encouraging a well-rounded approach to personal and academic development.
- Provide hands-on experiences that complement classroom learning, enabling students to apply their knowledge in real-world settings and improve the quality of their education through practical applications.
- Develop a sense of responsibility towards the community by encouraging students to actively participate in social and environmental initiatives, and appreciate rural culture, lifestyle, and wisdom.
- Promote teamwork and collaboration among students, educators, and community members to address local issues and challenges, enhancing collaborative problem-solving skills.
- Ensure the program is accessible to all students, regardless of their socio-economic background, while educating them about the status of various agricultural and development programs and the challenges faced by vulnerable households.

Learning Outcomes

After completing this course, students will be able to

- Gain an understanding of rural life, Indian culture and ethos and social realities
- Develop a sense of empathy and bonds of mutuality with the local community
- Appreciate significant contributions of local communities to Indian society and economy

- Learn to value the local knowledge and wisdom of the community
- Identify opportunities for contributing to community's socio-economic improvements

Course Structure: 2 Credits Course (30 hours)

Sr. No.	Module Title	Module Content	Assignment	Teaching/ Learning Methodology
1	Appreciation of Rural Society	Rural lifestyle, rural society, caste and gender relations, rural values with respect to community, nature and resources, elaboration of “soul of India lies in villages”, rural infrastructure.	Prepare a map (physical, visual or digital) of the village you visited and write an essay about inter-family relations in that village.	– Classroom discussions – Field visit – Assignment Map
2	Understanding rural and local economy and livelihood	Agriculture, farming, land ownership, water management, animal husbandry, non-farm livelihoods and artisans, rural entrepreneurs, rural markets, migrant labour.	Describe your analysis of the rural house hold economy, its challenges and possible pathways to address. Circular economy and migration patterns.	– Field visit – Group discussions in class – Assignment
3	Rural and local Institutions	Traditional rural and community organisations, Self-help Groups, Panchayati raj institutions (Gram Sabha, Gram Panchayat, Standing Committees), Nagarpalikas and municipalities, local civil society, local administration.	How effectively are Panchayati Raj and Urban Local Bodies (ULBs) institutions functioning in the village? What would you suggest to improve their effectiveness? Present a case study (written or audio-visual).	– Classroom – Field visit – Group presentation of assignment

4	Rural and National Development Programmes	History of rural development and current national programmes in India: Sarva Shiksha Abhiyan, Beti Bachao, Beti Padhao, Ayushman Bharat, Swachh Bharat, PM Awaas Yojana, Skill India, Gram Panchayat Decentralised Planning, National Rural Livelihood Mission (NRLM), Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA), SHRAM, Jal Jeevan Mission, Scheme of Fund for Regeneration of Traditional Industries (SFURTI), Atma Nirbhar Bharat, etc.	Describe the benefits received and challenges faced in the delivery of one of these programmes in the local community; give suggestions about improving the implementation of the programme for the poor. Special focus on the urban informal sector and migrant households.	– Classroom – Each student selects one program for field visit – Written assignment
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Note: The modules are suggestive in nature and students can opt any one activity for community engagement program and field project based on topic appropriate to their regional community context.

Suggestive Themes for field-based / community engagement activities are listed below:

- Interaction with Self Help Groups (SHGs) women members, and study their functions and challenges; planning for their skill-building and livelihood activities;
- Visit Mahatma Gandhi National. Rural Employment Guarantee Act 2005 (MGNREGS) project sites, interact with beneficiaries and interview functionaries at the work site;
- Field visit to Swachh Bharat project sites, conduct analysis and initiate problem solving measures;
- Conduct Mission Antyodaya surveys to support under Gram Panchayat Development Plan (GPDP);
- Interactive community exercise with local leaders, panchayat functionaries, grass-root officials and local institutions regarding village development plan preparation and resource mobilization;
- Visit Rural Schools/mid-day meal centres, study academic and infrastructural resources, digital divide and gaps;
- Participate in Gram Sabha meetings, and study community participation;
- Associate with Social audit exercises at the Gram Panchayat level, and interact with programme beneficiaries;
- Visit to local Nagarpalika office and review schemes for urban informal workers and migrants;
- Attend Parent Teacher Association meetings, and interview school drop outs;
- Visit local Anganwadi Centre and observe the services being provided;
- Visit local NGOs, civil society organisations and interact with their staff and beneficiaries;
- Organize awareness programmes, health camps, Disability camps and cleanliness camps;
- Conduct soil health test, drinking water analysis, energy use and fuel efficiency surveys and building solar powered village;

- Raise understanding of people's impacts of climate change, building up community's disaster preparedness;
- Organise orientation programmes for farmers regarding organic cultivation, rational use of irrigation and fertilizers, promotion of traditional species of crops and plants and awareness against stubble burning;
- Formation of committees for common property resource management, village pond maintenance and fishing;
- Identifying the small business ideas (handloom, handicraft, khadi, food products, etc.) for rural areas to make the people self-reliant.
- Management curriculum may include aspects of micro-financing in a rural context;
- Chemistry syllabus can have a component of conducting water and soil analysis in surrounding field areas;
- Political science syllabus could include a mapping of local rural governance institutions and their functioning.
- Environment education will include areas such as climate change, pollution, waste management, sanitation, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development and living
- Understanding panchayats and constitutional mandate of local governance
- Panchayat administration, Gram Sabha, Mahila Sabha, Gram Panchayat Development Plan (GPDP), local planning of basic services.
- Micro-finance, SHGs, system of savings and credit for local business, linkages to banks, financial inclusion.
- Rural – entrepreneurship, opportunities for small business in local communities, access to financial and technical inputs to new entrepreneurs.
- Renewable energy, access to household and community level solar and bio-mass systems for sustainable energy use.
- Participatory Monitoring and evaluation of socio-economic development programmes, and cost-benefit analysis of project proposals.
- Participatory decentralised planning, Gram Panchayat Development Plan (GPDP), and micro-level data analysis for new investments.
- Urban informal settlements and basic services.
- Migrant workers' livelihood security and social services.
- Hygiene and sanitation, improving health and personal behaviours, locally manageable decentralised systems and awareness against stubble burning.
- Water conservation, traditional practices of storage and harvesting, new systems of distribution and maintenance.
- Women's empowerment, gender inequality at home, community and public spaces, safety of girls and women, access to skills, credit and work opportunities.
- Child security, safety and good parenting, nutrition and health, learning and training for child care.

- Rural Marketing, market research, designing opportunities for rural artisans and crafts, and new products based on demand assessment.
- Community Based Research in Rural Settings, undertaking research that values local knowledge, systematises local practices and tools for replication and scale-up.
- Peri-urban development of informal settlements, mapping and enumeration, design of local solutions.

The field based activities should be conducted using community-based participatory research methodology in partnership with local community institutions and relevant public agencies so that the findings of research are shared with them and they develop ownership of the same.

Teaching and Learning Methods

- An ICT based online/offline module needs to be prepared for self-paced learning by students for one credit which can be supplemented through discussions in the classroom.
- Reading and classroom discussions, Participatory Research Methods and Tools, Community dialogues, Oral history, social and institutional mapping, interactions with elected panchayat leaders and government functionaries, Observation of Gram Sabha, Field visits to various village institutions
- Classroom theory must be linked to the realities of the local field areas.

Implementation Strategy

- **Field Projects:** Students will undertake field projects that address local community needs, such as environmental conservation, public health initiatives, or educational outreach programs. These projects will be guided by faculty and community mentors, ensuring that students receive support and feedback throughout the process.
- **Community Partnerships:** Collaborations with local organizations, NGOs, and government bodies will be established to provide students with diverse opportunities for engagement and learning. These partnerships will also help in identifying areas where students can make a significant impact.
- **Workshops and Training:** Regular workshops and training sessions will be conducted to equip students with the necessary skills and knowledge for effective community engagement. Topics will include project management, communication skills, and leadership development.
- **Assessment and Reflection:** Students will be encouraged to reflect on their experiences through presentations, reports, and discussions. This reflective practice will help them to critically analyze their work and its impact on the community.

Assessment:

- Readings from related literature including e-content and reflections from field visits should be maintained by each student in a Field Diary.
- Participation in Field Visits should be allocated 30% marks; group field project should have 40% of total marks; presentation of field project findings to the community institution should have 30% of total marks.

Semester IV

S.Y. B.A. (Geography)
Semester-IV
GEOG-DSC-241: Physical Geography: Atmosphere

Credit: 4

Internal Examination: 40

Marks: 100

External Examination: 60

Learning objectives	▪ To understand structure of the Earth's atmosphere and distinguish between weather and climate. ▪ To study the concept of insolation, solar constant, albedo, and the factors affecting the distribution of insolation and temperature on Earth. ▪ To examine the formation of atmospheric pressure belts and the classification and controlling factors of wind systems. ▪ To understand various forms of humidity and precipitation and their significance in different climatic processes.	
Course outcomes	After successful completion of this course, students are expected to: ▪ Explain the composition and layered structure of the atmosphere and differentiate between weather and climate. ▪ Evaluate the relationship between insolation, temperature, and the distribution of weather patterns. ▪ Describe different types of global wind patterns and explain how pressure gradient, Coriolis effect, and friction influence wind movement. ▪ Classify types of humidity and rainfall and evaluate their impact on agriculture, settlement, health, trade, and transport.	
Unit	Contents	Hours
Unit I	Earth's Atmosphere ▪ Definitions of Atmosphere ▪ Concept of Weather & Climate ▪ Composition of Atmosphere ○ Gases, ○ Water Vapour ○ Dust Particles ▪ Structure of Atmosphere	15
Unit II	Insolation & Temperature ▪ Concept of Insolation, Solar Constant and Albedo of the Earth ▪ Distribution of Isolation- ○ Factors Affecting on distribution of Insolation ▪ Distribution of Temperature- ○ Factors Affecting on distribution of Temperature.	15
Unit III	Atmospheric Pressure & Winds ▪ Atmospheric Pressure ○ Formation of Pressure Belts ▪ Winds ○ Factors Affecting on Wind ➤ Pressure Gradient ➤ Coriolis Force ➤ Frictional Force ○ Classification of Winds ➤ Planetary Winds	15

	➤ Periodical Winds ➤ Monsoon Winds	
Unit IV	Humidity & Rainfall ▪ Definition & Type of Humidity ○ Absolute ○ Specific ○ Relative ▪ Forms of Precipitation: (Rain Drizzle, Snow, Sleet.) ▪ Types of Rainfall ▪ Applications of Climatology in the field of Agriculture, Settlement, Health, Trade and Transport.	15
Study Resources	▪ Ahrens, C. D. (2018), Essentials of meteorology: An invitation to the atmosphere. Cengage Learning. ▪ Ahrens, C. D. (2019). Meteorology to day: An introduction to weather, climate, and the environment. Cengage Learning. ▪ Barry, R. G., & Chorley, R. J. (2009), Atmosphere, weather and climate. Routledge. ▪ Houghton, J. T., Ding, Y., Griggs, D. J., Noguer, M., van der Linden, P. J., Dai, X., ... & Maskell, K. (Eds.). (2001), Climate change 2001: The scientific basis (Vol. 1). Cambridge University Press. ▪ Lal, D. S. (2021). Climatology. Sharda Pustak Bhawan Publication, Allahabad. ▪ Lutgens, F. K., Tarbuck, E. J., & Tasa, D. (2020). The atmosphere: An introduction to meteorology. Pearson. ▪ Peixoto, J. P., & Oort, A. H. (1992), Physics of climate. American Institute of Physics. ▪ Singh, R. B., & Ghosh, S. K. (Eds.). (2019), Climate change and its impact on agriculture. CRC Press. ▪ Singh, Savindra. (2022), Climatology. Pravalika publications, Prayagraj. ▪ Spicer, T. (2014), Environmental monitoring and characterization. Academic Press. ▪ Trenberth, K. E. (2010), Atmospheric moisture residence times and cycling: Implications for rainfall rates with climate change. ▪ Wallace, J. M., & Hobbs, P. V. (2006), Atmospheric science: An introductory survey (2nd ed.). Academic Press.	

S.Y. B.A. (Geography)
Semester-IV
GEOG-DSC-242: Practical on IMD Weather Maps
(12 students per batch and 4 Hours per week per Batch)

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Learning objectives	▪ To develop skills in representing and interpreting climatic data using various graphical methods. ▪ To understand the representation of climatic data using various graphs and charts. ▪ To learn how to read and interpret weather maps using standard meteorological symbols and isobaric patterns. ▪ To understand the mechanism, function, and use of common weather instruments used in meteorological observations.	
Course outcomes	After successful completion of this course, students are expected to: ▪ Construct and interpret line graphs, bar graphs, Climograph, hythergraphs, and wind roses to represent different climatic elements. ▪ Identify and explain the use of instruments like thermometers, barographs, rain gauges, and anemometers in weather data collection. ▪ Analyze and interpret weather conditions for different seasons using I.M.D. weather maps. ▪ Perform basic analysis of meteorological data and draw conclusions about local or regional climate conditions	
Unit	Contents	Hours
Unit-I	Representation of climatic data: ▪ Elements of Climatic Data ▪ Line and Bar Graph ▪ Climograph ▪ Hythergraph ▪ Wind Rose	15
Unit-II	Study of following weather instruments with their mechanism, function and uses. ▪ Maximum and minimum thermometer ▪ Dry and wet bulb thermometer ▪ Barograph ▪ Rain gauge ▪ Cup anemometer	15
Unit-III	Introduction to I.M.D. weather map ▪ Signs and symbols ▪ Isobaric patterns ▪ Interpretation of weather map of following three seasons. ○ The rainy season ○ The winter season ○ The summer season	15

Unit-VI	Metrological Data analysis: ▪ Metrological data collection ▪ Metrological data analysis	15
Study Resources	▪ Singh, L.R. and Singh, R. (1973), Map Work and Practical Geography. Allahabad: Central Book Depot. ▪ Singh R. L. and Singh, R. P. B. (1991). Elements of Practical Geography. Ludhiana. Kalyani Publishers. ▪ Arjun,K. (2000), PratyakshikBhugol. Sumeru Prakashan, Dombivali. ▪ Ahirrao, D. Y. &Karanjkhele, E. K. (2002), Pratyakshik Bhugol Sudhershnan Prakashan, Nashik. ▪ Singh, G. (2008), Map work and practical geography. Vikas Publishing House pvt. ltd, New Delhi.	

Examination and Evaluation

Sr. No.	Particulars	Internal Marks	External Marks
01	Journal and Viva-voce	05	05
02	Class Practical performance	05	00
03	Practical Examination	10	25

S.Y. B.A. (Geography)
Semester-IV
GEOG-MIN-241: Physical Geography: Atmosphere

Credit: 4

Internal Examination: 40

Marks: 100

External Examination: 60

Learning objectives	▪ To understand structure of the Earth's atmosphere and distinguish between weather and climate. ▪ To study the concept of insolation, solar constant, albedo, and the factors affecting the distribution of insolation and temperature on Earth. ▪ To examine the formation of atmospheric pressure belts and the classification and controlling factors of wind systems. ▪ To understand various forms of humidity and precipitation and their significance in different climatic processes.	
Course outcomes	After successful completion of this course, students are expected to: ▪ Explain the composition and layered structure of the atmosphere and differentiate between weather and climate. ▪ Evaluate the relationship between insolation, temperature, and the distribution of weather patterns. ▪ Describe different types of global wind patterns and explain how pressure gradient, Coriolis effect, and friction influence wind movement. ▪ Classify types of humidity and rainfall and evaluate their impact on agriculture, settlement, health, trade, and transport.	
Unit	Contents	Hours
Unit I	Earth's Atmosphere ▪ Definitions of Atmosphere ▪ Concept of Weather & Climate ▪ Composition of Atmosphere ○ Gases, ○ Water Vapour ○ Dust Particles ▪ Structure of Atmosphere	15
Unit II	Insolation & Temperature ▪ Concept of Insolation, Solar Constant and Albedo of the Earth ▪ Distribution of Isolation- ○ Factors Affecting on distribution of Insolation ▪ Distribution of Temperature- ○ Factors Affecting on distribution of Temperature.	15
Unit III	Atmospheric Pressure & Winds ▪ Atmospheric Pressure ○ Formation of Pressure Belts ▪ Winds ○ Factors Affecting on Wind ➤ Pressure Gradient ➤ Coriolis Force ➤ Frictional Force ○ Classification of Winds ➤ Planetary Winds	15

	➤ Periodical Winds ➤ Monsoon Winds	
Unit IV	Humidity & Rainfall ▪ Definition & Type of Humidity ○ Absolute ○ Specific ○ Relative ▪ Forms of Precipitation: (Rain Drizzle, Snow, Sleet.) ▪ Types of Rainfall ▪ Applications of Climatology in the field of Agriculture, Settlement, Health, Trade and Transport.	15
Study Resources	▪ Ahrens, C. D. (2018), Essentials of meteorology: An invitation to the atmosphere. Cengage Learning. ▪ Ahrens, C. D. (2019). Meteorology to day: An introduction to weather, climate, and the environment. Cengage Learning. ▪ Barry, R. G., & Chorley, R. J. (2009), Atmosphere, weather and climate. Routledge. ▪ Houghton, J. T., Ding, Y., Griggs, D. J., Noguer, M., van der Linden, P. J., Dai, X., ... & Maskell, K. (Eds.). (2001), Climate change 2001: The scientific basis (Vol. 1). Cambridge University Press. ▪ Lal, D. S. (2021). Climatology. Sharda Pustak Bhawan Publication, Allahabad. ▪ Lutgens, F. K., Tarbuck, E. J., & Tasa, D. (2020). The atmosphere: An introduction to meteorology. Pearson. ▪ Peixoto, J. P., & Oort, A. H. (1992), Physics of climate. American Institute of Physics. ▪ Singh, R. B., & Ghosh, S. K. (Eds.). (2019), Climate change and its impact on agriculture. CRC Press. ▪ Singh, Savindra. (2022), Climatology. Pravalika publications, Prayagraj. ▪ Spicer, T. (2014), Environmental monitoring and characterization. Academic Press. ▪ Trenberth, K. E. (2010), Atmospheric moisture residence times and cycling: Implications for rainfall rates with climate change. ▪ Wallace, J. M., & Hobbs, P. V. (2006), Atmospheric science: An introductory survey (2nd ed.). Academic Press.	

S.Y. B.A. (Geography)
Semester-IV
GEOG-SEC-241: Weather Forecasting

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Learning objectives	▪ To understand the basic concepts and structure of the atmosphere. ▪ To learn about global and local weather systems and their classifications. ▪ To study climate change, its causes, and environmental impacts. ▪ To acquire knowledge of weather forecasting methods and the use of weather maps.	
Course outcomes	After successful completion of this course, students are expected to: ▪ Understand the structure, composition, and variations within the atmosphere. ▪ Identify and classify different weather systems and phenomena. ▪ Analyze climate change factors and their environmental consequences. ▪ Apply weather forecasting techniques and interpret weather maps effectively.	
Unit	Contents	Hours
Unit I	▪ Introduction To Atmosphere: ○ Elementary idea of atmosphere ○ Physical structure and composition ○ Compositional layering of the atmosphere ○ Variation of pressure and temperature with height air temperature and atmospheric pressure ▪ Measuring The Weather: ○ Wind; forces, units, speed, direction, humidity, clouds and rainfall.	8
Unit II	• Weather Systems: ○ Global wind systems air masses and fronts: classifications jet streams; ○ Local Thunder storms tropical cyclones: classification tornadoes; hurricanes	6
Unit III	• Climate And Climate Change ○ Climate: its classification; causes of climate change; global warming and its outcomes; ○ Air pollution; aerosols, ozone depletion, acid rain, environmental issues related to climate.	8
Unit IV	• Basics of Weather Forecasting ○ Weather forecasting: analysis and its historical background ○ Need of measuring weather, types of weather forecasting ○ Weather forecasting methods, criteria of choosing weather station ○ Basics of choosing site and exposure; satellites observations	8

	in weather forecasting ○ Weather maps: uncertainty and predictability, probability forecasts.	
Study Resources	• I.C. Joshi, 3rd edition 2014: Aviation Meteorology, Himalayan Books • The weather Observers Hand book, Stephen Burt, 2012, Cambridge University Press. • S.R. Ghadekar, 2001: Meteorology, Agromet Publishers, Nagpur. • S.R. Ghadekar, 2005: Text Book of Agrometeorology, Agromet Publishers, Nagpur. • Chpraman & Hall 1924: Charls Franklin Brooks, Why the weather, London. • John G. Harvey, 1995: Atmosphere and Ocean, The Artemis Press	

S.Y.B.Com /S.Y. B.Sc. (Geography)
Semester-IV
GEOG-SEC-242: Practical in Weather Forecasting

(12 students per batch and 4 Hours per week per Batch)

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Course Objectives	▪ To develop hands-on skills in using meteorological instruments ▪ To observe and record natural weather phenomena ▪ To analyze climatic elements ▪ To interpret visual and recorded weather data	
Course Outcomes	After successful completion of this course, students are expected to: ▪ Measure and record various atmospheric elements ▪ Demonstrate the ability to observe and classify weather conditions ▪ Analyze and interpret the collected data ▪ Apply their understanding of weather elements	
Unit	Contents	Hours
Unit I	Measure air temperature using a thermometer to understand daily variations.	16
	Track humidity levels with a hygrometer to assess moisture in the air.	
	Record wind speed with an anemometer to identify gust patterns.	
	Classify cloud types to predict weather based on appearance.	
Unit II	Measure rainfall with a rain gauge to determine precipitation amounts.	16
	Observe pressure changes with a barometer to detect weather system shifts.	
	Analyze satellite images to observe cloud cover and predict weather events.	
	Study dew formation by placing a cold surface outside to measure condensation.	
Unit III	Simulate a sea breeze using a heat source to demonstrate wind movement over land and water.	16
	Track daily temperature variations at different times to observe temperature trends.	
	Measure soil moisture to understand its effect on local weather conditions.	
	Create a simple barometer using water in a tube to measure atmospheric pressure.	
Unit IV	Track the direction of the wind with a wind vane to identify prevailing wind patterns.	12
	Observe cloud movement to understand wind patterns at different altitudes.	
	Monitor frost formation by leaving objects outdoors to observe freezing conditions.	

Study Resources	▪ Indian Meteorological Department (IMD) ▪ Indian Institute of Tropical Meteorology (IITM) ▪ National Institute of Oceanography (NIO) ▪ Indian National Remote Sensing Centre (INRSC) ▪ "Meteorology: An Introduction to the Wonders of the Weather" by Joseph M. Moran ▪ "Weather For Dummies" by John D. Cox ▪ "The Weather Book: An Easy-to-Understand Guide to the USA's Weather" by Jack Williams	
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Sr. No.	Particulars	Internal Marks	External Marks
01	Journal and Viva-voce	05	05
02	Class Practical performance	05	00
03	Practical Examination	10	25

S.Y.B.Com /S.Y. B.Sc. (Geography)
Semester-IV
GEOG-OE-241: Tourism Geography

Credit: 2

Internal Examination: 20

Marks: 50

External Examination: 30

Course Objectives	▪ To understand the fundamental concepts, scope, and importance of geography in tourism, and know the role of geography in tourism. ▪ To explore different types and classifications of tourism along with emerging tourism trends. ▪ To study tourism infrastructure and key tourist destinations in India. ▪ To examine the economic, socio-cultural, and environmental impacts of tourism.	
Course Outcomes	After successful completion of this course, students are expected to: ▪ Explain the role of geography in tourism and analyze recent trends in tourism geography. ▪ Classify tourism based on various criteria and describe modern tourism concepts in eco-tourism and adventure tourism. ▪ Aanalyze the significance of different tourist regions in India, including the Himalayas, deserts, coastal areas, and religious sites. ▪ Assess the positive and negative impacts of tourism and understand the importance of sustainable tourism development.	
Unit	Contents	Hours
Unit I	Introduction of Tourism Geography ▪ Meaning and Definition of the Tourism tourist ▪ Importance of Geography in Tourism ▪ Nature and Scope ▪ Importance of tourism ▪ Role of Geography in tourism ▪ Recent Trends in Tourism Geography	8
Unit II	Classification and Recent Concepts of Tourism ▪ Types of Tourism ▪ Classification on the basis of Nationality, Time of travel, Number of tourists, Purpose, Mode of transportation & Season ▪ Recent Concepts of Tourism ○ Agro-tourism ○ Eco-tourism ○ Adventure tourism	8
Unit III	Tourism in India ▪ Basic Tourism infrastructure ▪ Case study of Himalaya - (General introduction of the Himalayas & other ranges, hill station & their tourism significance) ▪ Desert-Jaisalmer ▪ Coastal - Goa ▪ Religious Tourism Concept, Definition and Significance	8

	○ Hinduism: -- Four Dham's (Badrinath, Rameshwaram, Puri and Dwarka), Varanasi, Mathura Vrindavan, Haridwar, Vaishno Devi, Shirdi, Bodh Gaya, Sanchi and Tirupati) ▪ E-Tourism: Introduction, Definition, Significance, DBMS, Functions & Components of E-Tourism	
Unit IV	Impact of Tourism ▪ Economy ▪ Socio-cultural aspects ▪ Environment ▪ Sustainable Development of Tourism	6
Study Resources	▪ Bhatia, A.K. (1991): International Tourism Fundamentals and Practices, Sterling Publishers Pvt. Ltd., New Delhi-110016 ▪ Bhatia, A.K.: Tourism Development, Sterling Publishers Pvt. Ltd., New Delhi-110016 ▪ Burkart and Medlik -Tourism, Past, Present and Future Heinemann, ELBS. (1981) ▪ Cooper, Fletcher, 1993: Tourism, Principles and practices, Pitman. Publishing, ▪ Geetanjali (2010): Tourism Policy and Planning, ABD Publishers, Jaipur ▪ Kaul: Dynamics of Tourism, Sterling Publishers Pvt. Ltd., New Delhi-110016 ▪ Mill and Morrison (1992): The Tourism system an Introductory Text, Prentice Hall ▪ P.S. Gill: Dynamics of Tourism (4 Vols) Anmol Publication. New Delhi, ▪ Wagh S.A.& Sonawane S.B. (2016): Paryatan Bhugol, Atharva Prakashan, Jalgaon	

S.Y. B.A. (Geography)
Semester-IV
GEOG. FP. 241: Field Projects

Credit: 2

Marks: 50

External Examination: 50

Guidelines for CEP & FP

In alignment with the National Education Policy (NEP) 2020, Moolji Jaitha College (Autonomous), Jalgaon is introducing the Community Engagement Program and Field Project at the undergraduate level. The NEP 2020 emphasizes holistic development, inclusivity, and integrating vocational education with academic learning, aiming to nurture socially responsible individuals. This course fosters a strong connection between education and real-world applications. We believe that experiential learning, community involvement, and fieldwork are essential components of a well-rounded education. These initiatives aim to bridge the gap between theoretical knowledge and practical experience, helping students develop critical thinking, problem-solving skills, and a sense of civic responsibility. Additionally, students will learn about the challenges faced by vulnerable households and appreciate local wisdom and lifestyles.

Inspired by NEP 2020, the Community Engagement Program and Field Project aim to produce knowledgeable, compassionate, and proactive graduates, contributing to a more just, equitable, and sustainable society.

Objectives

- Engage students in activities that foster emotional, social, and intellectual growth, encouraging a well-rounded approach to personal and academic development.
- Provide hands-on experiences that complement classroom learning, enabling students to apply their knowledge in real-world settings and improve the quality of their education through practical applications.
- Develop a sense of responsibility towards the community by encouraging students to actively participate in social and environmental initiatives, and appreciate rural culture, lifestyle, and wisdom.
- Promote teamwork and collaboration among students, educators, and community members to address local issues and challenges, enhancing collaborative problem-solving skills.
- Ensure the program is accessible to all students, regardless of their socio-economic background, while educating them about the status of various agricultural and development programs and the challenges faced by vulnerable households.

Learning Outcomes

After completing this course, students will be able to

- Gain an understanding of rural life, Indian culture and ethos and social realities

- Develop a sense of empathy and bonds of mutuality with the local community
- Appreciate significant contributions of local communities to Indian society and economy
- Learn to value the local knowledge and wisdom of the community
- Identify opportunities for contributing to community's socio-economic improvements

Course Structure: 2 Credits Course (30 hours)

Sr. No.	Module Title	Module Content	Assignment	Teaching/ Learning Methodology
1	Appreciation of Rural Society	Rural lifestyle, rural society, caste and gender relations, rural values with respect to community, nature and resources, elaboration of “soul of India lies in villages”, rural infrastructure.	Prepare a map (physical, visual or digital) of the village you visited and write an essay about inter-family relations in that village.	– Classroom discussions – Field visit – Assignment Map
2	Understanding rural and local economy and livelihood	Agriculture, farming, land ownership, water management, animal husbandry, non-farm livelihoods and artisans, rural entrepreneurs, rural markets, migrant labour.	Describe your analysis of the rural household economy, its challenges and possible pathways to address. Circular economy and migration patterns.	– Field visit – Group discussions in class – Assignment
3	Rural and local Institutions	Traditional rural and community organisations, Self-help Groups, Panchayati raj institutions (Gram Sabha, Gram Panchayat, Standing Committees), Nagarpalikas and municipalities, local civil society, local administration.	How effectively are Panchayati Raj and Urban Local Bodies (ULBs) institutions functioning in the village? What would you suggest to improve their effectiveness? Present a case study (written or audio-visual).	– Classroom – Field visit – Group presentation of assignment

4	Rural and National Development Programmes	History of rural development and current national programmes in India: Sarva Shiksha Abhiyan, Beti Bachao, Beti Padhao, Ayushman Bharat, Swachh Bharat, PM Awaas Yojana, Skill India, Gram Panchayat Decentralised Planning, National Rural Livelihood Mission (NRLM), Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA), SHRAM, Jal Jeevan Mission, Scheme of Fund for Regeneration of Traditional Industries (SFURTI), Atma Nirbhar Bharat, etc.	Describe the benefits received and challenges faced in the delivery of one of these programmes in the local community; give suggestions about improving the implementation of the programme for the poor. Special focus on the urban informal sector and migrant households.	– Classroom – Each student selects one program for field visit – Written assignment
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Note: The modules are suggestive in nature and students can opt any one activity for community engagement program and field project based on topic appropriate to their regional community context.

Suggestive Themes for field-based / community engagement activities are listed below:

- Interaction with Self Help Groups (SHGs) women members, and study their functions and challenges; planning for their skill-building and livelihood activities;
- Visit Mahatma Gandhi National. Rural Employment Guarantee Act 2005 (MGNREGS) project sites, interact with beneficiaries and interview functionaries at the work site;
- Field visit to Swachh Bharat project sites, conduct analysis and initiate problem solving measures;
- Conduct Mission Antyodaya surveys to support under Gram Panchayat Development Plan (GPDP);
- Interactive community exercise with local leaders, panchayat functionaries, grass-root officials and local institutions regarding village development plan preparation and resource mobilization;
- Visit Rural Schools/mid-day meal centres, study academic and infrastructural resources, digital divide and gaps;
- Participate in Gram Sabha meetings, and study community participation;
- Associate with Social audit exercises at the Gram Panchayat level, and interact with programme beneficiaries;
- Visit to local Nagarpalika office and review schemes for urban informal workers and migrants;
- Attend Parent Teacher Association meetings, and interview school drop outs;
- Visit local Anganwadi Centre and observe the services being provided;
- Visit local NGOs, civil society organisations and interact with their staff and beneficiaries;
- Organize awareness programmes, health camps, Disability camps and cleanliness camps;
- Conduct soil health test, drinking water analysis, energy use and fuel efficiency surveys and building solar powered village;

- Raise understanding of people's impacts of climate change, building up community's disaster preparedness;
- Organise orientation programmes for farmers regarding organic cultivation, rational use of irrigation and fertilizers, promotion of traditional species of crops and plants and awareness against stubble burning;
- Formation of committees for common property resource management, village pond maintenance and fishing;
- Identifying the small business ideas (handloom, handicraft, khadi, food products, etc.) for rural areas to make the people self-reliant.
- Management curriculum may include aspects of micro-financing in a rural context;
- Chemistry syllabus can have a component of conducting water and soil analysis in surrounding field areas;
- Political science syllabus could include a mapping of local rural governance institutions and their functioning.
- Environment education will include areas such as climate change, pollution, waste management, sanitation, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development and living
- Understanding panchayats and constitutional mandate of local governance
- Panchayat administration, Gram Sabha, Mahila Sabha, Gram Panchayat Development Plan (GPDP), local planning of basic services.
- Micro-finance, SHGs, system of savings and credit for local business, linkages to banks, financial inclusion.
- Rural – entrepreneurship, opportunities for small business in local communities, access to financial and technical inputs to new entrepreneurs.
- Renewable energy, access to household and community level solar and bio-mass systems for sustainable energy use.
- Participatory Monitoring and evaluation of socio-economic development programmes, and cost-benefit analysis of project proposals.
- Participatory decentralised planning, Gram Panchayat Development Plan (GPDP), and micro-level data analysis for new investments.
- Urban informal settlements and basic services.
- Migrant workers' livelihood security and social services.
- Hygiene and sanitation, improving health and personal behaviours, locally manageable decentralised systems and awareness against stubble burning.
- Water conservation, traditional practices of storage and harvesting, new systems of distribution and maintenance.
- Women's empowerment, gender inequality at home, community and public spaces, safety of girls and women, access to skills, credit and work opportunities.
- Child security, safety and good parenting, nutrition and health, learning and training for child care.

- Rural Marketing, market research, designing opportunities for rural artisans and crafts, and new products based on demand assessment.
- Community Based Research in Rural Settings, undertaking research that values local knowledge, systematises local practices and tools for replication and scale-up.
- Peri-urban development of informal settlements, mapping and enumeration, design of local solutions.

The field based activities should be conducted using community-based participatory research methodology in partnership with local community institutions and relevant public agencies so that the findings of research are shared with them and they develop ownership of the same.

Teaching and Learning Methods

- An ICT based online/offline module needs to be prepared for self-paced learning by students for one credit which can be supplemented through discussions in the classroom.
- Reading and classroom discussions, Participatory Research Methods and Tools, Community dialogues, Oral history, social and institutional mapping, interactions with elected panchayat leaders and government functionaries, Observation of Gram Sabha, Field visits to various village institutions
- Classroom theory must be linked to the realities of the local field areas.

Implementation Strategy

- **Field Projects:** Students will undertake field projects that address local community needs, such as environmental conservation, public health initiatives, or educational outreach programs. These projects will be guided by faculty and community mentors, ensuring that students receive support and feedback throughout the process.
- **Community Partnerships:** Collaborations with local organizations, NGOs, and government bodies will be established to provide students with diverse opportunities for engagement and learning. These partnerships will also help in identifying areas where students can make a significant impact.
- **Workshops and Training:** Regular workshops and training sessions will be conducted to equip students with the necessary skills and knowledge for effective community engagement. Topics will include project management, communication skills, and leadership development.
- **Assessment and Reflection:** Students will be encouraged to reflect on their experiences through presentations, reports, and discussions. This reflective practice will help them to critically analyze their work and its impact on the community.

Assessment:

- Readings from related literature including e-content and reflections from field visits should be maintained by each student in a Field Diary.
- Participation in Field Visits should be allocated 30% marks; group field project should have 40% of total marks; presentation of field project findings to the community institution should have 30% of total marks.

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