AC 01.09.23 ITEM NO: 15.1

Deccan Education Society's

Kirti M. Doongursee College of Arts, Science and Commerce (AUTONOMOUS)

Affiliated to

UNIVERSITY OF MUMBAI

Syllabus for
Program: Bachelor of Arts
Course: F.Y.B.A
Subject: **GEOGRAPHY**

Choice Based Credit System (CBCS)
with effect from
Academic Year 2023-2024

PROGRAM OUTCOMES

PO	Description
A student completing Bachelor's Degree in **Arts** Program will be able to	
PO1	**Disciplinary Knowledge:** Demonstrate a blend of conventional discipline knowledge and its applications to the modern world. Execute strong theoretical and practical understanding generated from the chosen program.
PO2	**Critical Thinking and Problem solving:** Exhibit the skill of critical thinking and use higher order cognitive skills to approach problems situated in their social environment, propose feasible solutions, and help in its implementation.
PO3	**Social competence:** Express oneself clearly and precisely to build good interpersonal relationships in personal and professional life. Make effective use of linguistic competencies to express themselves effectively in real and virtual media. Demonstrate multicultural sensitivity in group settings.
PO4	**Research-Related Skills:** Seeks opportunity for research and higher academic achievements in the chosen field and allied subjects and is aware about research ethics, intellectual property rights and issues of plagiarism. Demonstrate a sense of inquiry and capability for asking relevant/appropriate questions; ability to plan, execute and report the results of a research project be it in field or otherwise under supervision.
PO5	**Personal and professional competence:** Equip with strong work attitudes and professional skills that will enable them to work independently as well as collaboratively in a team environment.
PO6	**Effective Citizenship and Ethics:** Demonstrate empathetic social concern and equity centered national development; ability to act with an informed awareness of moral and ethical issues and commit to professional ethics and responsibility.
PO7	**Environment and Sustainability:** Understand the impact of the scientific solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
PO8	**Self-directed and Life-long learning:** Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes.

Deccan Education Society's

Kirti M. Doongursee College (autonomous) Proposed

Curriculum as per NEP 2020 Year of implementation-

2023-24

Name of the Department: Geography

Semester	Course Code	Course Title	Vertical	Credit
I	**K23UAGEOMJ111**	**Geography of Human and Cultural Landscape**	Major	4
	K23UAGEOMJ112	**Demography and Population Studies**	Major	2
	K23UAGEOVC141	**Basics of Remote Sensing**	VSC	2
	K23UAGEOSC151	**E- Content Creation**	SEC	2
II	**K23UAGEOMJ211**	**Principles of Geomorphology**	Major	4
	K23UAGEOMJ212	**Regional Geography of Maharashtra**	Major	2
	K23UAGEOMR221	**Social and Cultural Geography**	Minor	2
	K23UAGEOOE231	**Geo- Tourism**	OE	2
	K23UAGEOVC241	**Environmental Impact Assessment**	VSC	2
	K23UAGEOSC251	**Beginners Course to Calligraphy**	SEC	2

Course Code	MAJOR SEM – I	Credits	Lectures /Week
K23UAGEOMJ111	Paper I: Geography of Human and Cultural Landscape	4	4

Course Outcomes:

After successful completion of this course, students would be able to

- Learner will understand basic concepts of human geography and will be able to describe subject evolution.
- Learner will be able to elucidate different branches of human geography such as economics-geography, social geography, etc.
- Learner will be introduced to settlement geography, its concepts, types of settlement, classification, etc.
- It will help learner to construct thematic maps by using various map techniques in the field of research.
- Learner will gain information related to human geography that will help them to execute in various competitive examinations.

Unit	Topics	No of Lectures
I	**Human Geography: An Introduction** ● Human Geography - Meaning, Definition, Nature, Scope Branches of Human Geography ● Different Approaches of Human Geography ● Man, Environment relation, Determinism Possibilism, Probabilism ● Space and Society: World Cultural Regions; Race; Tribes, Religion and Language.	15
II	**Settlement** ● Concept of Rural and Urban Settlements ● Types and Pattern of settlement, Trends and Patterns of World Urbanization. ● Site and Situation; and factors affecting location of	15

	Settlement. ● Functional classification of Rural and Urban settlement	
III	**Migration** ● Concept and Types of Migration ● Causes and Consequences of migration – pull and push factors. ● Emerging trends of migrations or Issues of legal and illegal international migration ● Case study of Migrant refugee/infiltration crisis	**15**
IV	**Practical** ● Map - Definition, Components, Type, and Importance ● Map scale - Definition, Verbal Scale and Graphical Scale ● Construction of Choropleth Maps, Isopleth, Dot, and Flow Maps Construction of Population Pyramid	**15**

References:

- Human Geography – Dr. Dipesh Karmarkar
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Additional References:

1. Johnson R. J. & Others (1983): The Dictionary of Human Geography, Blackwell England
2. Singh, L. R. (2009): "Fundamentals of Human Geography", Sharda Pustak Bhavan, Allahabad
3. Hussain, M. (2011): "Human Geography", Rawat Publications, Jaipur
4. Dixit R. D. (1997): "Geographical Thought: A Contextual History of Ideas", PHI Learning Private Limited, Delhi
5. Singh, R. Y. (2002): "Geography of Settlements", Rawat Publications, Jaipur
6. Siddhartha, K. and Mukherjee, S. (2016): "Cities, Urbanisation and Urban Systems", KitabMahal, Delhi
7. Chandna, R. C. (2016): "Geography of Population: Concepts, Determinants and Patterns", Kalyani Publishers, Ludhiana
8. Bhende, A. and Kanitkar, T. (2015): "Principles of Population Studies", Himalaya Publishing House, Mumbai
9. Koser, K. (2007): "International Migration: A Very Short Introduction", Oxford University Press, UK
10. Castles, S., Haas, H., and Miller, M. (2013): "The Age of Migration: International Movements in the Modern World", Guilford Pr.

11. Leong, G. C. and Morgan, G. C. (1982): “Human and Economic Geography”, Oxford University Press, Delhi
12. Knowles, R. and Warding, J. (2012): “Economic and Social Geography”, Rupa and Co., Kolkata
13. Waugh, D. (2009): “The New Wider World”, Oxford University World, Oxford
14. Mahmood, A. (2008): Statistical Methods in Geographical Studies”, Rajesh Publications, New Delhi
15. Singh, L. R. (2009): “Fundamentals of Practical Geography”, Sharda Pustak Bhavna, Allahabad

Course Code	MAJOR SEM – I	Credits	Lectures /Week
K23UAGEOMJ112	Paper II: Demography and Population Studies	2	2

Course Outcomes:

After successful completion of this course, students would be able to

- Understand population growth and migration study and will help the learner to solve social issues.
- Understand patterns and processes of population growth and its implications.
- Understand the basic concepts and methods used in population studies.
- Analyze and interpret demographic data to understand patterns and trends in population dynamics.
- Evaluate the impact of demographic changes on society and the economy.
- Identify and explain the causes and consequences of population growth and decline.
- Apply demographic methods to make population projections and forecasts.
- Critically evaluate population policies and their effectiveness in achieving demographic goals.
- Communicate demographic data and findings effectively to both academic and non-academic audiences.
- Develop ethical considerations and practices when conducting population research.
- Demonstrate an understanding of how demographic changes are connected to broader social, economic, and environmental issues.

Unit	Topics	No of Lectures
I	**Introduction to Demography and Population Studies** • Definition and Scope of Demography, Importance of Population Studies • Trends and Patterns of World Population change • Population Size, Distribution and Growth – Determinants and Patterns; Theories of Growth – Malthusian Theory and Demographic Transition Theory	15

	• Population-Resource Relationships and Regional Resource Development	
II	**Demographic Calculations** • Defining the Field – Nature and Scope; Sources of Data with special reference to India (Census, Vital Statistics and NSS, NFHS) (Human being as dividend) • Population Dynamics: Fertility, Mortality and Migration – Measures, Determinants, and Implications. • Case Study Contemporary Issues – Ageing of Population; Declining Sex Ratio, Analysis of Demographic Change, and its Impact on Society • Calculation and interpretation of population density, and population growth rate, sex ratio, population growth rate, life table measures (including life expectancy and survival probabilities).	**15**

References:

- Barrett, H. R., (1995): Population Geography, Oliver and Boyd.
- Bhende, A. and Kanitkar, T., (2000): Principles of Population Studies, Himalaya
- Publishing House.
- Chandna, R. C. and Sidhu, M. S., (1980): An Introduction to Population Geography,
- Kalyani Publishers.
- Chandna, R C (2006): JansankhyaBhugol, Kalyani Publishers, Delhi
- Chandna,R.C., Geography of Population, Kalyani Publishers, Ludhiana.
- Clarke, J. I., (1965): Population Geography, Pergamon Press, Oxford.
- Debjani, Roy., Population Geography,Books and Allied Private Limited, Kolkata.
- Jones, H. R., (2000): Population Geography, 3rd ed. Paul Chapman, London.
- Lutz, W., Warren, C. S. and Scherbov, S., (2004): The End of the World Population
- Growth in the 21st Century, Earthscan
- Maurya, S D (2009): JansankyaBhugol, Sharda Putak Bhawan, Allahabad
- Newbold, K. B., (2009): Population Geography: Tools and Issues, Rowman and
- Littlefield Publishers.
- Pacione, M., (1986): Population Geography: Progress and Prospect, Taylor and
- Francis.

- Panda, B. P., (1988): JanasankyaBhugol, M P Hindi Granth Academy, Bhopal
- Wilson, M. G. A., (1968): Population Geography, Nelson

Course Code	VOCATIONAL SKILL COURSE SEM – I	Credits	Lectures /Week
K23UAGEOVC141	Basics of Remote Sensing	2	2

Course Outcomes:

After successful completion of this course, students would be able to

- **Understanding of the basic principles of remote sensing, including electromagnetic radiation, spectral signatures, and image interpretation.**
- **Ability to interpret aerial and satellite images using basic remote sensing techniques and software.**
- **Knowledge of the applications of remote sensing in various fields, such as environmental monitoring, land use planning, and disaster management.**
- **Familiarity with the different types of remote sensing platforms and sensors, as well as their strengths and limitations.**
- **Critical thinking skills to evaluate the accuracy and reliability of remote sensing data and analysis.**
- **Understanding of the ethical issues related to the use of remote sensing data and the importance of data privacy and security.**

Unit	Topics	No of Lectures
I	**Introduction to Remote Sensing** • **Definition and principles of remote sensing** • **Electromagnetic radiation and the electromagnetic spectrum** • **Platforms and sensors used in remote sensing.** • **Spatial, spectral, radiometric, and temporal resolutions** • **Data acquisition, processing, and interpretation**	15
II	**Remote Sensing Applications** • **Image interpretation techniques** • **Digital image processing and analysis** • **Mapping land cover and land use** • **Environmental monitoring and change detection** • **Applications in agriculture, forestry, water resources, and urban planning**	15

References:

- **"Remote Sensing and Image Interpretation" by Thomas Lillesand, Ralph W. Kiefer,**

and Jonathan W. Chipman

- **"Introduction to Remote Sensing" by James B. Campbell and Randolph H. Wynne**
- **"Remote Sensing: Principles and Interpretation" by Floyd F. Sabins Jr.**
- **"Fundamentals of Remote Sensing" by Emilio Chuvieco and Alfredo Huete**

Online References:

- **NASA Remote Sensing Tutorial: https://earthobservatory.nasa.gov/features/RemoteSensing**
- **European Space Agency Remote Sensing: https://www.esa.int/Applications/Observing_the_Earth/Remote_sensing**
- **USGS Remote Sensing: https://www.usgs.gov/core-science-systems/national-geospatial-program/remote-sensing**
- **Remote Sensing and GIS Resources: http://www.gisresources.com/remote-sensing-gis-resources/**

Course Code	SKILL ENHANCEMENT COURSE SEM – I	Credits	Lectures /Week
K23UAGEOSC151	E- Content Creation	2	2

Course Outcomes:

After successful completion of this course, students would be able to

- **Develop an understanding of the fundamentals of e-content creation, including multimedia, graphics, and interactive media.**
- **Develop skills to effectively design, develop, and deliver e-content to a targeted audience.**
- **Understand the role of technology in e-content creation, and its potential to enhance learning outcomes.**
- **Develop critical thinking and problem-solving skills required to develop innovative e-content solutions.**
- **Learn about current trends and best practices in e-content creation, including accessibility and usability standards.**
- **Gain experience in planning, creating, and evaluating e-content using industry-standard tools and software.**
- **Develop the ability to work collaboratively and effectively in a team environment, including communication, project management, and conflict resolution skills.**
- **Understand the ethical and legal issues related to e-content creation and use.**
- **Develop an awareness of the impact of e-content on society and the environment.**
- **Cultivate a lifelong learning attitude towards e-content creation and keep up to date with emerging technologies and trends.**

Unit	Topics	No of Lectures
I	**Introduction to e-Content Creation** • **Introduction to e-content and its importance** • **Understanding the target audience** • **Planning and organizing e-content.** • **Best practices in e-content creation** • **Tools and software for e-content creation**	15
II	**E-Content Creation Process** • **Developing a concept and theme for e-content** • **Creating engaging and interactive e-content**	15

	• **Incorporating multimedia elements in e-content** • **Designing e-content for different devices and platforms** • **Testing and refining e-content**	

References:

- **"E-Learning and the Science of Instruction" by Ruth C. Clark and Richard E. Mayer**
- **"Design for How People Learn" by Julie Dirksen**
- **"e-Learning and the New Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning" by Ruth C. Clark and Richard E. Mayer**
- **"The Art of Explanation: Making your Ideas, Products, and Services Easier to Understand" by Lee LeFever**
- **"The Accidental Instructional Designer: Learning Design for the Digital Age" by Cammy Bean**

Online References:

- **E-Learning Industry - a website providing articles, e-books, and online courses on e-learning and e-content creation.**
- **Articulate - a platform offering e-learning software and training courses for creating online courses and interactive content.**
- **Udemy - an online learning platform providing courses on e-content creation and instructional design.**
- **LinkedIn Learning - an online learning platform offering courses on various topics, including e-content creation and instructional design.**
- **eLearning Brothers - a website offering templates, stock assets, and custom development services for e-learning and e-content creation.**

Course Code	MAJOR SEM – II	Credits	Lectures /Week
K23UAGEOMJ211	Paper I: Principles of Geomorphology	4	4

Course Outcomes:

After successful completion of this course, students would be able to

- Understand the nature and scope of geomorphology, key concepts, and the systems approach to studying landforms.
- Apply knowledge of the Earth's interior structure to explain the processes that shape the Earth's surface.
- Evaluate and compare different types of earth movements, including isostasy, plate tectonics, folds, faults, earthquakes, and volcanoes.
- Analyze and interpret the processes of weathering, mass wasting, and the cycle of erosion (as proposed by Davis and Penck).
- Analyze and interpret the evolution of different types of landforms, including fluvial, karst, aeolian, glacial, and coastal, both in terms of their erosional and depositional processes.
- Apply knowledge of geomorphological processes to real-world scenarios, including environmental management, disaster mitigation, and resource exploration.
- Communicate effectively about geomorphological concepts and processes in written and oral formats.
- Apply critical thinking and problem-solving skills to address real-world geomorphological issues and challenges.

Unit	Topics	No of Lectures
I	**Introduction to Geomorphology** ● Definition and scope of geomorphology ● Key concepts in geomorphology ● Systems approach to studying landforms, Applied Geomorphology and Environment. ● Geological Time Scale, Earth's interior structure and its influence on landforms	15
II	**Earth Movements and Tectonic Processes** ● Isostasy and its role in earth movements	15

	• Plate tectonics and its influence on landforms • Types of folds and faults • Earthquakes and volcanoes	
III	**Geomorphic Processes and Evolution of Landforms** • Weathering processes and their impact on landforms • Types of mass wasting and their role in shaping landforms • Davis and Penck's cycle of erosion • Erosion and sediment transport, Erosional and depositional processes of fluvial, karst, aeolian, glacial, and coastal landforms	**15**
IV	**Practical** • Method of Showing Relief: Hachure, hill shading, Interpolation, contour, form line, and layer tints • Drawing of contours and their cross section of slope elements, and fluvial, wind, coastal landforms. Identification of drainage pattern from the 1:50,000 toposheets. • Identification of various geological structures from geological maps. • Drawing of strike lines and determination of direction, amount of dip.	**15**

References:

- 1. Bloom, A. L., (2003): Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of India, New Delhi.
- 2. Bridges, E. M., (1990): World Geomorphology, Cambridge University Press, Cambridge.
- 3. Christopherson, R. W. and Birkeland, G. H., (2012) Geosystems: An Introduction to
- Physical Geography (8th edition), Pearson Education, New Jersey.
- 4. Das Gupta, A and Kapoor, A.N., (2001) Principles of Physical Geography, S.C. Chand & Company Ltd. New Delhi.
- 5. Dayal, P., (1996) A Text book of Geomorphology. Shukla Book Depot, Patna.
- 6. Huggett, R.J. (2007) Fundamentals of Geomorphology, Routledge, New York.
- 7. Kale, V. S. and Gupta A., (2001): Introduction to Geomorphology, Orient Longman, Hyderabad.

- 8. Khullar, D.R., (2012) Physical Geography, Kalyani Publishers, New Delhi.
- 9. Mal, Suraj, Singh, R.B. and Huggel, Christian (2018): Climate Change, Extreme Events and Disaster Risk Reduction, Springer, Switzerland, pages 309.
- 10. Selby, M.J., (2005): Earth's Changing Surface, Indian Edition, OUP
- 11. Singh, S (2009):BhautikBhugolkaSwaroop(Hindi), PrayagPustak,Allahabad.
- 12. Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to Physical Geology, 4th Edition, John Wiley and Sons.
- 13. Strahler, A. H. and Strahler, A N., (2001): Modern Physical Geography (4/E), John Wiley and Sons, Inc., New York.
- 14. Summerfield M. A. (2013): Global Geomorphology, Routledge, New York
- 15. Thornbury, W. D., (2004): Principles of Geomorphology, Wiley, New York.
- 16. Tikka, R N (1989): Bhautik Bhugolka Swaroop (Hindi), Kedarnath Ram Nath, Meerut

Course Code	**MAJOR SEM – II**	**Credits**	**Lectures /Week**
K23UAGEOMJ212	**Paper II: Regional Geography of Maharashtra**	**2**	**2**

Course Outcomes:

After successful completion of this course, students would be able to

- Gain comprehensive knowledge about the geographical features, climate, landforms, and natural resources of Maharashtra.
- Understand the spatial distribution of various physical and human phenomena within Maharashtra, including population patterns, economic activities, and cultural diversity.
- Apply knowledge of regional geography to analyze and interpret the social, economic, and environmental issues and challenges faced by different regions within Maharashtra.
- Develop analytical skills to critically evaluate the interrelationships between physical and human factors influencing regional development in Maharashtra.
- Synthesize information from various sources to develop a holistic understanding of the regional disparities, regional planning, and sustainable development initiatives in Maharashtra.
- Evaluate the effectiveness of regional policies, development projects, and resource management strategies in Maharashtra, considering their impact on the environment, society, and economy.

- Develop effective communication skills to present findings, analysis, and recommendations related to the regional geography of Maharashtra through written reports, presentations, and discussions.

Unit	Topics	No of Lectures
I	**Physical Geography of Maharashtra** • **Introduction to the physical geography of Maharashtra** • **Study of the major landforms and physical features in Maharashtra, such as the Western Ghats, Deccan Plateau, and coastal plains** • **Examination of the climatic patterns and variations across different regions of Maharashtra** • **Analysis of the hydrology and water resources, including rivers, lakes, and dams in Maharashtra** • **Exploration of the natural vegetation and biodiversity in the state**	**15**
II	**Human Geography of Maharashtra** • **Overview of the population distribution and demographic characteristics of Maharashtra** • **Examination of the cultural diversity and ethnic composition of different regions in Maharashtra** • **Analysis of the urbanization process and urban growth patterns in cities like Mumbai, Pune, and Nagpur** • **Study of the agricultural practices and patterns, including major crops and agricultural regions in Maharashtra** • **Investigation of the industrial development and economic activities across different regions of Maharashtra**	**15**

References:

- Maharashtra: Society, Culture, and Economy by Vijay P. Bhosale
- Geography of Maharashtra by A.R. Kulkarni and M.M. Kulkarni
- Maharashtra: Land and People by S.P. Patil
- Regional Planning in India: Maharashtra by A.S. Sanjay
- Geography of Maharashtra by Dr. S.N. Lahiri
- Maharashtra: Physical and Human Geography by M.V. Shinde and S.S. Limaye

- Geography of Maharashtra by R.M. Yadav and S.R. Yerme
- Maharashtra: A Geographical Analysis by Dr. B.R. Kherde
- Geography of Maharashtra State by G.S. Ghurye and A.G. McCarroll
- Maharashtra Geography by B. K. Tatke

Course Code	MINOR SEM – II	Credits	Lectures /Week
K23UAGEOMR221	Social and Cultural Geography	2	2

Course Outcomes:

After successful completion of this course, students would be able to

- Understand the scope and content of socio-cultural geography.
- Understand the concept of cultural hearth and realm, cultural diffusion, diffusion of regions.
- Develop an understanding of cultural segregation and cultural diversity, technology, and development.
- Learn about the different races and racial groups of the world.
- Identify the socio-cultural space and regions of India.
- Understand the indicators of social welfare and wellbeing

Unit	Topics	No of Lectures
I	**Introduction to Social and Cultural Geography** ● Social Geography and Cultural Geography: Concept, Nature, and Scope ● Approaches: Possibilistic, Behavioral, Radical and Welfare, Modern and Postmodern ● Races, Caste, Ethnicity, Religions, Tribes: Types, Characteristics and Distribution ● Languages: Distribution of Major languages families	15
II	**Socio-cultural Development and Problems in India** ● **Concept and Indicators of Social Welfare and Wellbeing – Happiness Index** ● **Socio -cultural Challenges and Problems in Rural and Urban area; Problems Related to Health and Education - Programs or Policies** ● **Social Movements: Environmental, Labour, Dalit, Tribal, Women and Farmers** ● **Tribal Development, Women Empowerment:**	15

	Programmes and Policies	

References:

- **Ahmad, A. (1999): "Social Geography", Rawat Publications, Jaipur**
- **Bannerjee-Guha, S. (2004): "Space, Society and Geography", Rawat Publications, Jaipur**
- **Carter and Jones (2000) Social Geography – An Introduction contemporary issues.**
- **CMS (2010): "India Corruption Study 2010: Is the Scenario Changing?", CMS Research House, New Delhi, Downloaded from**
- **http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan047870.pdf**
- **Desai, M. (2007): "Women and the Built Environment", Zuban Publications, Delhi.**
- **Dutt, A., Wadhwa, V. et al (2012): "Facets of Social Geography: International and Indian Perspectives", Foundation Books, New Delhi**
- **Gharpure, V. (2013): "Samajik ani anskrutik Bhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur**
- **Jyptirmoy Sen (2007): A Text Book of Social and Cultural Geography," Kalyani Publsiher, New Delhi.**
- **Karmarkar, D. (2012): "Fishy Spaces: Globalisation and Livelihood of Indigenous Fishermen – A Case of**
- **Mumbai", LAP LAMBERT Academic Publishing, Germany**
- **Knowles, R and Wareing, J. (1996): "Economic and Social Geography", the Made Simple Series, Rupa& Co., Calcutta**

Course Code	OPEN ELECTIVE SEM – II	Credits	Lectures /Week
K23UAGEOOE231	Geo-tourism	2	2

Course Outcomes:

After successful completion of this course, students would be able to

- **Explain the concepts of geo-tourism, geodiversity, and geo-tourism sustainability, and the principles and practices associated with them.**
- **Analyze the socio-economic and environmental impacts of geo-tourism and identify ways to mitigate negative impacts and enhance positive ones.**
- **Evaluate the role of geoparks, geological and geomorphological sites, and natural and cultural landscapes in promoting sustainable geo-tourism.**
- **Analyze the key stakeholders involved in geo-tourism and understand the importance of collaboration and partnerships for sustainable geo-tourism development.**
- **Develop skills in geo-tourism planning and management, including site selection, visitor management, and interpretation.**
- **Use technology and multimedia tools to design innovative and engaging geo-tourism experiences.**
- **Understand the ethical and cultural considerations associated with geo-tourism, including respect for indigenous knowledge and cultural heritage.**
- **Evaluate case studies of successful and unsuccessful geo-tourism initiatives, and apply lessons learned to future geo-tourism projects.**

Unit	Topics	No of Lectures
I	**Introduction to Geo-tourism** • **Definition, concepts, and principles of geo-tourism** • **Overview of geodiversity and its significance in tourism** • **Historical and cultural aspects of geo-tourism** • **Socio-economic and environmental impacts of geo-tourism** • **Geo-tourism sustainability and responsible tourism practices**	15
II	**Geo-tourism Planning and Management** • **Geoparks and geo-tourism destinations** • **Site selection, visitor management, and**	15

	interpretation • **Geo-tourism marketing and promotion** • **Role of stakeholders in geo-tourism development** • **Use of technology and multimedia tools in geo-tourism**	

References:

- **Farsani, N. T., Coelho, C. O., & Costa, C. A. (Eds.). (2014). Geoheritage and Geotourism: A European Perspective. Springer.**
- **Dowling, R. K., & Newsome, D. (Eds.). (2006). Geotourism: The Tourism of Geology and Landscape. Goodfellow Publishers.**
- **Newsome, D., & Dowling, R. K. (2010). Geotourism: The Tourism of Geology and Landscape (2nd ed.). Goodfellow Publishers.**
- **Staszak, J. F. (Ed.). (2018). Geotourism: An Emerging Sector in Tourism. CABI.**

Online References:

- **Global Geoparks Network: http://www.globalgeopark.org/**
- **The International Association of Geotourism: https://www.iageotourism.com/**
- **United Nations World Tourism Organization: https://www.unwto.org/**
- **The International Ecotourism Society: https://www.ecotourism.org/**

Course Code	VOCATIONAL SKILL COURSE SEM – II	Credits	Lectures /Week
K23UAGEOVC241	Environmental Impact Assessment	2	2

Course Outcomes:

After successful completion of this course, students would be able to

- **Understand the basic concepts, principles, and techniques used in EIA, including the identification, prediction, evaluation, and management of environmental impacts.**
- **Analyze the legal and institutional framework for EIA, including the roles and responsibilities of different stakeholders and the public participation process.**
- **Critically evaluate the strengths and limitations of different EIA methods and tools, such as checklists, matrices, and geographic information systems.**
- **Apply EIA methodologies to assess the potential environmental impacts of various types of development projects, including those in the energy, transport, and extractive sectors.**
- **Synthesize and communicate the results of EIA studies to diverse audiences, including project developers, policymakers, affected communities, and environmental organizations.**

Unit	Topics	No of Lectures
I	**Principles and Methods of Environmental Impact Assessment** • **Introduction to Environmental Impact Assessment (EIA)** • **Legal and institutional framework for EIA** • **Scoping process and identification of potential impacts** • **Assessment of impacts on physical and biological environments** • **Assessment of impacts on social and cultural environments** • **Mitigation and management of impacts** • **Public participation and stakeholder engagement in EIA**	15
II	**Case Studies and Applications of Environmental Impact Assessment** • **Application of EIA to specific sectors such as mining, transportation, and energy**	15

	• **EIA and biodiversity conservation** • **EIA and climate change** • **EIA and sustainable development** • **Evaluation of EIA effectiveness and alternatives to EIA** • **Emerging trends and challenges in EIA**	

References:

- **"Environmental Impact Assessment: Theory and Practice" by Peter Wathern**
- **"Environmental Impact Assessment: A Guide to Best Professional Practices" by Charles H. Eccleston and John W. Heywood**
- **"Environmental Impact Assessment: Process and Practice" by Kevin Hanna and Chris Barrow**
- **"Environmental Impact Assessment: A Comparative Review" by M.V. Naidu and Y.A. Hussaini**
- **"Environmental Impact Assessment Handbook: A Practical Guide for Planners, Developers and Communities" by Barry Sadler and Lee Johnson**

Online References:

- **International Association for Impact Assessment: https://www.iaia.org/**
- **United Nations Environment Programme - Environmental Impact Assessment: https://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/environmental-impact-assessment**

Course Code	SKILL ENHANCEMENT COURSE SEM – II	Credits	Lectures /Week
K23UAGEOSC251	Beginners Course to Calligraphy	2	2

Course Outcomes:

After successful completion of this course, students would be able to

- **Develop an understanding of the history and evolution of calligraphy, both manual and digital.**
- **Acquire knowledge of the different tools, materials, and software used in calligraphy.**
- **Learn basic techniques of calligraphy, including lettering styles, stroke formation, and composition.**
- **Develop hand-eye coordination and fine motor skills through practice of calligraphy techniques.**
- **Acquire the ability to interpret and create calligraphy art pieces for various purposes, such as greeting cards, invitations, logos, and branding.**
- **Develop an appreciation for the aesthetics and cultural significance of calligraphy.**
- **Apply critical thinking skills to analyze and evaluate calligraphy pieces, including one's own work and that of others.**
- **Develop problem-solving skills in the context of calligraphy, such as overcoming technical difficulties or adjusting designs to fit specific requirements.**
- **Enhance creativity and self-expression through the medium of calligraphy.**
- **Develop an understanding of the role of calligraphy in contemporary art, design, and communication.**

Unit	Topics	No of Lectures
I	**Introduction to Calligraphy** • Definition, History of calligraphy, Calligraphy at the Global level, Types of Calligraphy: Classical Calligraphy & Modern Calligraphy • **Tool Kit, Different Types of Pens, Different Types of Nibs, Different Types of Brushes, Different Types of Inks** • **Practice Sessions: Display of Writing items, Discussion on the usage of different types of pens, nibs, and brushes through hands-on activities**	15
II	**Foundation to Calligraphy**	15

	• How to write letters? Majuscules, Minuscules, Numbers, Learning Strokes, Sans Serif B- point, Celtic, Italian Script, Roman Script, Gothic Script • Practice Sessions: Learning and practicing strokes- Upstroke, Downstroke, Overturn, Under turn, Compound curve, Oval, Ascending loop. • Hands-on activities and Assessment on Sans Serif B-point, Celtic, Italian Script, Roman Script, Gothic Script, Flourishing	

References:

- Suepsuan, P. A. (2021). Start Calligraphy The Right way to write: Learn Calligraphy The Complete Book - Modern Calligraphy Pen For Beginners, Learning Resources Step By Step Number Line, Mastering Modern Calligraphy. Independently published.
- • C., & Co., T. P. (2020). Modern Calligraphy Set for Beginners: A Creative Craft Kit for Adults featuring Hand Lettering 101 Book, Brush Pens, Calligraphy Pens, and More. Paige Tate & Co

Evaluation Scheme for First Year (UG) under NEP (4 credits)

I. Internal Evaluation for Theory Courses – 40 Marks

1) Continuous Internal Assessment (CIA) Assignment –

Tutorial/ Case Study/ Project /Presentations/ Group Discussion / Ind. Visit. – 20 marks

2) Continuous Internal Assessment (CIA) ONLINE Unit Test – 20 marks

II. External Examination for Theory Courses – 60 Marks

Duration: 2 Hours

Theory question paper pattern:

Question	Based on	Marks
Q.1	Unit I	15
Q.2	Unit II	15
Q.3	Unit III	15
Q.4	Unit IV	15

● All questions shall be compulsory with internal choice within the questions.

● Each Question may be subdivided into sub questions as a, b, c, d, etc. & the allocation of Marks depends on the weightage of the topic.

NOTE: To pass the examination, attendance is compulsory in both Internal & External (Theory + Practical) Examinations.

Evaluation Scheme for First Year (UG) under NEP (2 credits)

I. Internal Evaluation for Theory Courses – 20 Marks

1) Continuous Internal Assessment (CIA) Assignment - Tutorial/ Case Study/ Project /Presentations/ Group Discussion / Ind. Visit. – 10 marks

2) Continuous Internal Assessment (CIA) ONLINE Unit Test – 10 marks

II. External Examination for Theory Courses – 30 Marks

Duration: 1 Hours

Theory question paper pattern: All questions are compulsory.

Question	Based on	Marks
Q.1	Unit I	15
Q.2	Unit II	15

● All questions shall be compulsory with internal choice within the questions.

● Each Question may be subdivided into sub questions as a, b, c, d, etc. & the allocation of Marks depends on the weightage of the topic.

NOTE: To pass the examination, attendance is compulsory in both Internal & External (Theory + Practical) Examinations