Programme Specific Outcomes (PSOs) and Course Outcomes (COs): FYUGP

Name of the Department: GEOGRAPHY

Programme Specific Outcomes (PSOs): Geography is the study of places in relations to people and environments. Geographers examine how human culture interacts with the natural environment and the way those spatial locations and places can have an impact on people. Geography seeks to understand where things are found, why they are there, and how they develop and change over time. The modern academic discipline of Geography is rooted in ancient practice, concerned with the characteristics of places, in particular their natural environments and peoples, as well as the relations between the two.

Programme offered by the Department	Outcomes
B.A./B. Sc. Major	On completion of the Programme, the students would be able to (in 150 words): **PSO1. Gain knowledge on philosophical base of the subject:** Students can gain knowledges of the fundamental basis and historical progression of the subject. **PSO2. Acquiring knowledge of physical and social interaction:** Students will have a general understanding about the physical process in relation to space and time. They will be able to acquire the knowledge of social processes on various physical environment. Thus they will be capable to correlate the knowledge of physical geography with the human geography. **PSO3. Applications of modern technologies:** They will be able to learn the applications of various modern tools and technologies including Remote Sensing & GIS which can help Regional Planning for societal development **PSO4. Development of observation power:** Students will be capable to develop their observation power through field experience and in future they will be able to identify the socio-environmental problems of a locality. **PSO5. Development of Communication Skill and Interaction Power:** After completion of the project works they will be efficient in their communication skill as well as power of social interaction.

B.A./B.Sc. Minor	On completion of the Programme, the students would be able to (in 150 words): **PSO1. Gain knowledge on philosophical base of the subject:** Students can gain knowledges of the fundamental basis and historical progression of the subject. **PSO2. Acquiring knowledge of physical and social interaction:** Students will have a general understanding about the physical process in relation to space and time. They will be able to acquire the knowledge of social processes on various physical environment. Thus they will be capable to correlate the knowledge of physical geography with the human geography. **PSO3. Applications of tools and technologies:** They will be able to learn the applications of various modern tools, statistics and technologies which can help to apply these for planning purpose. **PSO4. Development of observation powers:** They will be capable to develop their observation power through field experience that enabled to identify the socio-environmental problems of a locality. **PSO5. Uunderstanding the environmental problems** : They will learn different environmental problems and enabled knowledge to mitigate the problems.

'Outcomes' means the kind of knowledge and skill acquired by the students on completion of the Programme.

Course Outcomes (COs):

B.A./B.Sc. Major: Geography

Sem	Course Code	Course Title	Outcomes (in 100 words)
I	**UGEOMAJ11001**	**Geotectonic**	1. Understanding earth's tectonic and structural evolution with relation to geological time scale. 2. Gain knowledge about earth's interior with the help of different indirect observations especially seismology and isostasy. 3. Acquire knowledge about earth movements with mountain building theories, folds and faults and associated landforms. 4. Develop an idea about concept of plate tectonics, continental drift and sea floor spreading and resultant landforms. 5. Develop practical idea about scale and map projections.
	UGEOSEC11001	**Disaster Management**	1. Learn how to effectively organize and write a project report incorporating appropriate maps, diagrams, charts and tables. 2. Develop skills required for teamwork, including collaboration, coordination, and task allocation, by working in groups under faculty members' supervision. 3. Develop a comprehensive understanding of hazards and disasters, enabling them to recognize and assess potential risks and vulnerabilities in different contexts. 4. Equip with the knowledge and skills necessary to contribute to the development of effective disaster management plans and strategies. 5. Enhance critical thinking abilities by examining the causes, impacts and management strategies associated with hazards and disasters.
II	**UGEOMAJ12002**	**Settlement Geography**	1. Finding the origin and historical growth of rural and urban settlements: types, patterns and morphology. 2. Tracing the trends and patterns of world urbanization from ancient to modern period. 3. Strengthened knowledge on theories of urban land use model. 4. Creating consciousness on the growing knowledge on Settlement Geography.

	UGEOSEC 12002	**Sustainable Development**	1. Gain extensive knowledge on sustainability and Sustainable Development. 2. Know various approaches of Sustainable Development e.g. the Millennium Development Goals, Inclusive Development, the challenges of universal health coverage, policies and global cooperation for climate change. 3. Implementation mechanisms of Sustainable Development policies and programmes.
III	**UGEOMAJ23003**	**Geomorphology**	1. Understanding Geomorphology as a discipline of Landform Studies along with its fundamental concepts. 2. Gain knowledges on geomorphic processes: weathering, mass wasting and cycle of erosion. 3. Examine the landform evolution processes in relation to of erosional and depositional activities: fluvial, aeolian, glacial, coastal and karst. 4. Understanding the Slope development processes and theories of slope development (Davis, Penck and King). 5. Develop practical ideas on rocks and minerals as key of landform evolution with topographical maps.
	UGEOMAJ23004	**Geography of Resources**	1. Finding the natural distribution of different natural resources, their utilization, problems and management practices. 2. Finding the distribution, utilization, problems and management of forests and energy resources. 3. Making practices on conservation of natural resources, sustainable resource development. 4. Skill enhancement to handle data on Computation of Human Development Index in national and local level.
	UGEOMAJ23005	**Population Geography**	1. Know the facts on population related parameters, problems and dynamics. 2. Gaining knowledge on sources of population data distribution and growth of Population. 3. Analyzing theories of population; (Malthusian Theory and Optimum Population Theory). 4. Finding contemporary issues of Population Geography: ageing of population; declining sex ratio, HIV/AIDS etc. 5. Gaining knowledge about future population growth with various statistical tools.
	UGEOSEC 23003	**Environmental Geography**	1. Finding the historical progression of Environmental Geography. 2. Finding the human-environment relationships: adaptation in different biomes (tundra, savanna and equatorial). 3. Know the various ecosystem of the World and adaptation mechanism in special environmental conditions.

			4. Know global, national and regional environmental programmes and policies. Creating consciousness and perceptions by making project report on surrounding environmental problems.
IV	**UGEOMA J24006**	**Climatology**	1. Understanding the atmospheric composition and structure; insolation and temperature: factors and distribution, heat budget, temperature inversion. 2. Finding out the relationships among atmospheric pressure, winds: planetary winds, circulation, jet streams. 3. Gain knowledge on Monsoon, atmospheric moisture: evaporation, humidity, condensation, precipitation types and climatic regions of the world. 4. Finding the origins of tropical cyclones and extra tropical cyclones. 5. Strengthen knowledge base on explanation of Indian Daily Weather Reports and reading data from the instruments.
	UGEOMA J24007	**Geography of India**	1. Gain extensive knowledge on different physical components and characteristics of India. 2. Finding on economic resources of the country: mineral and power resources iron ore, coal, petroleum, gas; agricultural production industrial development: Automobile and Information Technology. 3. Gain knowledge on diverse social components of India and their spatial distribution e.g. race, caste, religion, language and tribes; 4. Applications of the different scheme of Regionalization of India.
	UGEOMA J24008	**GIS**	1. Gaining knowledge on Geographical Information System (GIS). 2. Acquire practical skills in handling spatial data, including geo-referencing toposheets, digitizing point, line, and polygon features, and working with raster and vector data. 3. Gain knowledge on Global Positioning System (GPS), GIS Data Structures, GIS Data Analysis etc. 4. Finding growing popularity and Application of GIS: Land use mapping; urban sprawl analysis, forests monitoring etc.
V	**UGEOMA J35009**	**Soil Geography**	1. Gain concept of soil, and related topics like soil profile and profile development in different environment. 2. Know the physical and chemical properties of soil and soil colloid and classes of soils made by different scholars and organizations.

			3. Develop skills in determining soil type by Ternary Diagram textural plotting. Construction of Ergograph. 4. Develop the ability to question, reason, and draw logical conclusions based on concepts, various theories, and classifications related to soil.
	UGEOMA J35010	**Rural Development**	1. Know various concepts of Rural Development its basic elements, measures of level of rural development; 2. Finding paradigms of rural development; from Gandhian approach to Lewis model of economic development. 1. Gain knowledge about major Rural Development Programmes implemented in India: PMGSY, SJSY, MNREGA, Jan Dhan Yojana and NABARD; Panchayati Raj System and rural development policies.
	UGEOMA J35011	**Agricultural Geography**	1. Gain knowledge on Agricultural Geography and allied disciplines. 2. Finding the determinants of Agriculture: Physical, technological and institutional. 3. Identifying the Agricultural Regions of India for planning purpose: Agro-climatic, Agro-ecological & Crop Combination Regions. 4. Expanding knowledge on Agricultural Systems of the world, Agricultural land use model and Agricultural revolutions in India: Green, White and Blue. 5. Experimenting different parameters for regionalization scheme of Agriculture.
	UGEOMA J35012	**Geographical Thought**	1. Finding the philosophical base of Geographical ideas during the ancient period in Western world and India. 2. Gain knowledge on evolution of geographical ideas during the medieval period in Western world and India. 3. Examining the trends of modern geographical thinking in Germany, France, Britain, and United States of America. Experiencing Debates on Geographical themes: Environmental Determinism and Possibilism, Systematic and Regional.
	UGEOMA J36013	**Biogeography**	1. Develop skills in the determination of plant-species diversity using the matrix method, identification of xeric period using Ombothermic graphs, and hyetograph. 2. Gain skills in mathematical/graphical construction of map projections.

			3. Evolving the knowledge within students with the critical thinking regarding various aspects of biogeography including bio-geochemical cycles, world biomes, floristic realms and zoogeographical regions of the world, Biodiversity etc. 4. students will aware regarding various wildlife conservation projects in India.
VI	**UGEOMA J36014**	**Urban Geography**	1. Expanding knowledges on Urban Geography. 2. Finding the pattern of urbanization in developed and developing countries. 3. Awareness on functional classification of towns and cities: quantitative and qualitative methods (F.S, Hudson, C.D. Harris and R. Ramachandran). 4. Know the dark sides of Urban Issues: problems of housing, slums, civic amenities.
	UGEOMA J36015	**Industrial Geography**	1. Develop skills in understanding types of manufacturing industries and theories of industrial location. 2. Develop competency in exploration regarding location, production, and world distribution of iron steel and cotton textile industry; production and world distribution of automobile and ship-building industry; World distribution, problems, and prospects of paper and heavy chemical industry. 3. Strengthened the knowledge of industrial regions, the industrial policy of India, 1991 and the Make in India scheme, 2014. 4. Cultivating research qualities among students with a scientific field report on a specific project.
	UGEOMA J36016	**Fundamentals of Remote Sensing**	1. Know the Remote Sensing and allied techniques. 2. Gain knowledge on Satellite Remote Sensing: Principles, EMR Interaction with atmosphere and earth surface; satellites (Landsat and IRS); sensors; Visual Satellite Image Interpretation etc. 3. Skill enhancement on Remote Sensing techniques and its applications of Remote Sensing in Land use/Land cover mapping.

B.A./B.Sc. Minor: Geography

Semester	Course Code	Course Title	Outcomes (in 100 words)
I	**UGEOMIN1 0001**	**Physical Geography**	1. Understanding Origin and evolution of the earth with relation to scientific theories. 2. Gain knowledge about earth's interior with the help of different indirect observations especially seismology and isostasy. 3. Examine the major landform evolution processes in relation to of erosional and depositional activities: fluvial, Aeolian and glacial. 4. Develop practical ideas on rocks and minerals as key of landform evolution with topographical maps.
II	**UGEOMIN1 0001**	**Physical Geography**	1. Understanding of the interior of the Earth, including its composition and structure. 2. Familiarity with the Continental Drift Theory proposed by Wegener and the concept of plate tectonics. 3. Gain knowledge on various geological phenomena such as folds, faults, weathering, and mass movement. 4. Understanding of erosional and depositional landforms formed by fluvial (river), glacial, and aeolian (wind) processes. 5. Knowledge of the composition and structure of the atmosphere, including insolation and the heat budget, temperature distribution, pressure belts, wind systems and different types of precipitation, cyclones, anti-cyclones and climate change. 6. Understanding of the distribution of temperature and salinity in ocean water and the factors influencing ocean currents.
III	**UGEOMIN2 0002**	**Human Geography**	1. Understanding the discipline of Human Geography, its Scope and content. 2. Develop knowledge base on space and society: cultural regions; race, language, religion and caste; 3. Finding the temporal changes and spatial distribution of population and its composition with the theory of Malthus; 4. Develop practical knowledge of presenting population data by diagrams and thematic maps.
IV	**UGEOMIN2 0002**	**Human Geography**	1. Become adept at critically analysing geographic phenomena and understanding the underlying factors driving population growth, settlement patterns, and urbanization.

			2. The practical exercises equip students with the competence to collect, interpret, and present geographical data, enhancing their ability to conduct research and contribute to the field. 3. By focusing on India, students gain a contextual understanding of human geography, enabling them to apply their knowledge and skills to real-world issues related to population, settlement, and urban development within the country.
V	**UGEOMIN30003**	**Economic Geography**	1. Acquire a solid grasp of the nature and scope of economic geography, the Concept and classification of economic activities, the definition and classification of resources, and Economic theories, including Von Thunen's agriculture theory and the industry theory of Weber & Losch. 2. Learner in-depth knowledge of conditions of growth and world distribution of various crops, including wheat, rice, cotton, tea and coffee, major fishing grounds of the world, and characteristics of lumbering in tropical and temperate forests. 3. Explore the production and world distribution of Iron-steel, cotton textile and paper industry, modes of transport, Geographical factors of transport development, and factors affecting international trade
VI	**UGEOMIN30003**	**Economic Geography**	1. Become adept at critically analysing economic geography and understanding the economic theories. 2. Make students more competent by enriching their knowledge regarding conditions of growth and world distribution of crops, major fishing grounds of the world, production and world distribution of Iron-steel, cotton textile and paper industry. 3. Develop understanding about modes of transport, geographical factors of transport development, factors affecting international trade.