

Department of Geography

Program Specific Outcome

- Students will demonstrate knowledge of the major physical features of the Earth and the ability to locate examples of Earth's major physical features on a map.
- Students will demonstrate knowledge of the major cultural features of the Earth and the ability to locate examples of Earth's major cultural features on a map.
- Students will demonstrate knowledge of quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.
- Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and use the tools and methods of GIS.
- Students will demonstrate their knowledge of physical geography and the methods and techniques for observing, measuring, recording and reporting on geographic phenomena.
- Students will demonstrate their competence to work individually and as a team to develop and present a client-driven GIS solution.
- Students will demonstrate their knowledge of resource and environmental issues. Students will also be able to demonstrate their knowledge of the role that geography can play in analyzing resource / environmental degradation and improving resource / environmental management.
- Students will demonstrate their knowledge of urban and regional planning and how effective land management influences the utility of the land.
- Students will demonstrate their knowledge of the formation, use, conservation and management of water resources including legal, economic, political and societal factors and the evaluation of attempts to manage water resources. Students will also be able to demonstrate a working knowledge of hydrology, water availability and quality, hazards, use, demand and allocation.
- Students will demonstrate their knowledge of one specialized area of geography and demonstrate their expertise in this specialized area of geography.

Course outcome of Geography Department

Class	Course	Outcome
F.Y.B.Sc.	Paper I Physical Geography I	<ul style="list-style-type: none"> • Understand the effect of rotation of revolution the Earth • Know the internal structure of the earth know the importance of longitudes & latitudes International Date line and Standard time • Understand interior structure of the earth • Understand Theory regarding of Origin of Continents and oceans • Study the formation of Rocks Understand the work of internal and external forces and their associated landforms.
	Paper II Physical Geography II	<ul style="list-style-type: none"> • Understand the importance of Atmosphere • Understand the composition of atmosphere • Know Measurement of Atmospheric Pressure and formation of Pressure Belts • Understand the types of winds
S.Y.B.A.	Geo. 231: G2 Human Geography	<ul style="list-style-type: none"> • Understand the relationship of man and environment • Studies of races of man kinds. • Understand the modes of life of aximo, pigmy, gonad ,Bhil And nagas. • Importance of Right to Information Acts.
	Geo. 232: S1 Geography of Maharashtra	<ul style="list-style-type: none"> • Understand the Geographical Personality of Maharashtra • Study the Major river in Maharashtra • Understand the Geographical Personality of Maharashtra • Study of major crops of Maharashtra. • Acquire knowledge of forests in Maharashtra.
	Geo. 241: G2 Economic Geography	<ul style="list-style-type: none"> • Study the Human Economic Activities • Explain the Weber theory Rostov modal • Understand the mineral and power resources • Study of the distribution of engineering, cotton sugar Industries in India • Study Of India"s foreign tread

Geo. 242 S1 Regional Geography Of India	<ul style="list-style-type: none"> • Understand the location Physiography, Drainage, Climate, and Vegetation of India • To know the silent feature, problems and prospects of Agriculture. • Study the Problems And Prospect of Industrial Area. • Population Composition India.
S2 Practical Geography Study of Scales, Projections and Surveying (with the help of plane Table and G.P.S.)	<ul style="list-style-type: none"> • Understand the different surviving techniques. • Knowledge about preparation of layout. • Understand the socio economic condition of the villages. • Acquire knowledge of preparation of drawing of profile with the help of Dumpy level.
S3 Environmental Geography	<ul style="list-style-type: none"> • Understand Structure, Components of Atmosphere. • Study about Nutrient cycling. • Acquire knowledge about biodiversity. • Understand the value of Resource. • Understand environmental problems there Cause, Effect and Remedies. • Get knowledge about environmental hazards and management. • Make aware about conservation of resources. • Understand the various environmental protection acts.
S3 Remote Sensing & GIS	<ul style="list-style-type: none"> • Understand the History of Remote Sensing • Know Arial Photographs and Satellite Imageries • Acquire Knowledge about Indian Remote sensing. • Investigate components and function of GIS • Study GIS Data models. • Introduce GPS and Its Functions. • Make use GIS & GPS software.
G3 Population Geography	<ul style="list-style-type: none"> • Understand the history of population • Understand the types of data • Study of distribution and density of population. • Get knowledge of population theories. • Investigate Current Issues and Problems in India

T.Y.B.A.

G3 Political Geography

- Understand the history of Political Geography.
- Get knowledge about Evolution of states & nations.
- Get knowledge of Geopolitical theories.
- Investigate Problems and disputes in India

S4 Practical: Interpretation of Toposheet, weather reports, Cartographic techniques & Geo Statistical Methods.

- Introduce the student of top sheet, weather map.
- Understand the mechanism function of topographical maps.
- Understand interpretation of weather images.
- Get knowledge about Geo Statistical Methods.

Geo.311: Geomorphology

- To know the fundamentals of Physical Geography.
- Understand latitudes, longitudes and international date line.
- Acquire knowledge about origin of various landforms.
- Understand the origin of oceans and currents.
- To Understand formation of rocks their types and uses.
- Understand the work of internal forces.
- Acquire knowledge of external forces.
- Study the land forms and process.
- Study the denudation processes.

Geo.312: Climatology

- Understand the structure, composition of Atmosphere.
- Understand weather phenomena winds, humidity, precipitation.
- Understand heat balance.
- Understand forecasting methods.
- To understand the process of weather forecasting.
- Study of koppers classification.
- To understand climatic changes through Dust and carbon dioxide theory.

Geo.313: Oceanography

- Understand importance of ocean.
- Knowledge about effect of ocean currents.
- Understand human impacts on Ocean.

		<ul style="list-style-type: none"> • Study about types of tides. • To make aware about jadeites use of water. • To understand Watershed management and water harvesting Structure.
Geo.314: Plant Geography		<ul style="list-style-type: none"> • To understand the Function and types of Biogeography. • To understand the controlling factors on distribution of plants • To Acquire Knowledge about bio geographical regions of India. • Major soil types and there agricultural potential of India.
Geo. 315: Soil Geography		<ul style="list-style-type: none"> • Importance of soil in food Production. • To study the soil forming process. • To understand Chemical and physical properties of soil. • Know soil types of India. • Understand food Security and soil quality.
Geo.316: Monsoon Asia		<ul style="list-style-type: none"> • Understand economic Political importance of Monsoon Asia. • Understand the physiography , drainage, climate of Monsoon Asia. • May the major crops, types of Agriculture of Monsoon Asia. • Understand the Monsoon Phenomena.
Geo. 321: Zoo Geography		<ul style="list-style-type: none"> • Introduce the create Awareness about conservation of animals. • Understand the ecology testimony of animal in relation of Geography. • Motivate the students to conservation of Animals. • Understand the geographical dispersion of Animal. • Understand the Theory of Distribution of Animals.
Geo.322: Remote sensing And GIS		<ul style="list-style-type: none"> • Understand the History of Remote Sensing • Know Arial Photographs and Satellite Imageries • Acquire Knowledge about Indian Remote sensing. • Investigate components and function of GIS • Study GIS Data models. • Introduce GPS and Its Functions. • Make use GIS & GPS software.

Geo.323: Water Resource Management	<ul style="list-style-type: none"> • Understand the Hydrological cycle. • To know the Importance of water Resources. • To compute water requirement of Different Crops • Create Awareness about water harvesting methods.
Geo.324 Geography of Health	<ul style="list-style-type: none"> • Understand the Ecology and epidemic Deciles. • Find out the Geographical Background of Diseases. • Create Awareness o malnutrition and hygiene. • Understand the Process of health care planning in India. • Function of WHO, UNICEF and RED CROSS.
Geo.325: Geo statistical Methods	<ul style="list-style-type: none"> • Understand the representation of Statistical data. • Know the Importance of Statistic in Geography. • Compute of Measures of Central tendency of dispersion. • Calculation and plotting moving Average. • Compute the Correlation of Pearson's and Spearman's methods. • Statistical data Analysis of simple regression.
Geo.326: Regional Geography of USA	<ul style="list-style-type: none"> • Understand the location Physiography, Drainage, Climate, and Vegetation of USA. • To know the silent feature, problems and prospects of Agriculture. • Study the Problems And Prospect of Industrial Area. • Population Composition of USA to India.
Geo.301: Morphometric Techniques	<ul style="list-style-type: none"> • To understand method of representation of relief. • Drawing of Profile of slope maps. • Demarcation of drainage basin of watershed Estimation of Basin area. Drainage Frequency, Bifurcation ratio. • Drawing cross section and measurement of angle of Dip thickness of rock. • Understand the basic concept of RS. • Identify the various landforms. • Mapping and interpretation of Arial Photograph. • Calculation of scale of land sat imageries. • Understand the GIS& GPS.

	Geo. 302: Practical of Remote sensing, GIS and GPS	<ul style="list-style-type: none"> • To Develops Skill of soil and water analysis techniques. • To SuGeoests fertilizers to the crops according soil analysis. • To collect soil and water Sample.
M.A/M.Sc-1st Year	Geo. 101: Principles of Economic Geography	<ul style="list-style-type: none"> • Students Understand about the Nature and Scope of Economic Geography, approaches and recent trends of economics in the field of geography • Understand about the basic Economic Processes- Production, Exchange, Consumption and its applications • Understand the fundamental theories in subject. • Review, understand and apply the modes of economics development by various models • Compare the economic environment and economic development in the world • Understand the economies scale, transportation and communication and nature and role of international trade.
	Geo. 102: Principles of Population and Settlement	<ul style="list-style-type: none"> • Understand the Nature and Scope of Population Geography and their evolution, significance and approaches for the study. • Understand the Sources of Population Data and History of World Population and some factors responsible for world population and data sources for study. • To understand the fundamental Concepts Related to Population such as density, over, optimum & under population, fertility, mortality and population for future perspectives. • To review and understand the subject matter with the help of Theories of Population • Fundamental/Basic Statistical Analysis using Statistical Software MS-Excel • Understand the Population Movement, Migration and some causes, consequences and its effects. • Understand the Nature and Scope of Settlement Geography Characteristics of Rural and Urban Settlements according to Indian Census and nature, scope, evolution and study methods. • Understand the settlement types, pattern and nature and process of urban settlement and some basic concept related to settlement geography.
	Geo. 103: Principles of Climatology	<ul style="list-style-type: none"> • Understand the introduction to Climatology considering weather & climate, role of climate in

human life, aims, nature, scope, and some other sub division of the course.

- Understand the Atmosphere and their process and function, origin, composition, structure of Atmosphere.
- To examining the Insolation and Heat Budget and its factors effects and their relations to other some elements.
- Understand the concept of temperature and factors, horizontal, vertical and inversion of temperature
- Identify the Atmospheric pressure and winds humidity and concept of precipitation and its types.
- To compare the Airmasses and Fronts, atmospheric destructions and its relation of local to global
- Understand the climatic classification based of nature and variability in climatic variations by Koppen.s and Thornwaites climatologist.

Geo. 104: Principles of Geomorphology

- Understand the nature, scope and significance of geomorphology and fundamental concepts in subject.
- To examining the Origin and Evolution of the earth primary relief features by different theories in subject.
- Understand about Exogenous Processes considering weathering and mass wasting and nature and types of the slope.
- Evaluate the fundamental Model of Davisian Cycle of Erosion to learn the function of five and its landforms development process.
- Understand formation, process and development of Fluvial and Karst Landforms
- To recognize and understand the formation, process and development of Glacial and Aeolian Landforms in geomorphology

Geo. 105: Practical of Computerize Data Analysis Techniques in Human Geography

- Students understand the Microsoft Excel, work sheet and learn the basic about the preparation of graphs, maps, in software for Presentation Techniques
- To evaluate and investigation the population data in Microsoft excel software.
- Applied and understand the data analysis techniques for rural and urban settlement and prepare the adequate maps, various graphs.
- Evaluate the Data Analysis Techniques in Agricultural Geography and Climatology
- Understand the various basics statistical Techniques for analysis the geographical data.
- Organize the field work and collect the authentic and appropriate data about selected village and

		<p>analyzed that data help with Microsoft Excel, work sheet and prepare slide and the village report for presentation.</p>
	<p>Geo. 201: Geographical Thoughts</p>	<ul style="list-style-type: none"> • Students understand the pre history of geographical Ideas in different duration form Greeks, roman"s, Arab and impact of explorations & discoveries. • Understand the modern geographical thoughts and contribution of eminent geographers. • To learn about the beginning of modern geography, fundamental concepts and models in geography. • Examining the sciences of geography and Geography in the Second Half of the 20th Century and its trends in geographical thoughts • Compare between the fundamental concepts in geography these are General Geography v/s Regional Geography, Physical Geography v/s Human Geography, and Determinism Geography v/s Possibility. • To understand the present status and application of modern techniques and its uses in climatology, geomorphology, economics geography, and population geography.
	<p>Geo. 202: Social and Cultural Geography</p>	<ul style="list-style-type: none"> • Understand the nature, scope, and concept, relationship between culture and social environment, and right of information act. • To examining the cultural complex and traits of culture and its concepts. • Evolution to civilization and various cultural development and cultural system according to religion, language and geography, and global cultural changes. • To study the origin and growth of culture and agriculture and its basic concepts. • Understand the concept of space and social process and present status.
	<p>Geo. 203: (B) Geoinformatics-I</p>	<ul style="list-style-type: none"> • Understand the modern techniques in geography under this course such as remote sensing and aerial photography. • Examining the history, basic theories of EMR, and other concepts. • Understand and get the knowledge about fundamental concept, types of aerial photography, characteristics of aerial photographs and aerial camera. • Review on development of Indian remote sensing and functions of IRS.

M.A/M.Sc- 2nd Year	Geo 204: Geo- Statistical Methods	<ul style="list-style-type: none"> • To understand the types of remote sensing, and types of platforms in remote sensing. • To get an knowledge about satellite sensor and types of sensors, and their functions and characteristics • Understand the data product, types of data product and its applications and uses in remote sensing. <ul style="list-style-type: none"> • Understand the introduction of geo-sciences system and statistical techniques and characteristics of data. • To examining to probability assessment and their calculation procedures and applications and uses in different field of geography. • Understand the concept of sampling and designing and conducting a sample survey for data collation and data analysis. • Evaluate, calculate and understand the parametric statistics in geo-science system small sized sample and Non Parametric Statistics in geo-science system of various test and techniques. • To understand the regression analysis in geo sciences system and calculation, application in various field of geography.
	Geo. 205: Cartographic Techniques with the Help of GIS &	<ul style="list-style-type: none"> • Excursion Report <ul style="list-style-type: none"> • Understand the introductory part of GIS software, its tool, functions, data import, scale factors, and basics of digitization • Use this software for prepare the various types of maps in geography with the help of cartographic Techniques of GIS software. • Applied this software and cartographic techniques for analysis and study in rural settlement geography and urban settlement for planning and development. • Understand the cartographic techniques and its tolls, functions, applied in agriculture geography and physical geography for assessment and visualization purpose. • Help with these techniques, tool, methods, procedures; analysis potential and cartographic technique etc. prepare the project report considering all types of data related to geography of any selected study area or village.
	Geo. 301 (A) : Rigional Geography of U.S.A	<ul style="list-style-type: none"> • Understand the location, geostrategic importance, characteristics of size of USA

		<ul style="list-style-type: none"> • To examine the physiographic features of USA • To understand climatic variations, types of soil and vegetation and their problems. • To extract and understand the natural resources, energy and mineral resources • Understand to agricultural activities, patterns, regions, problems and prospect, and some important issues related to USA.
	<p>Geo302: Environmental Geography</p>	<ul style="list-style-type: none"> • Understand the fundamental concept related to environment, meaning, structure, types, component, geography and environment, man's interaction with environment • To study about the nature, scope, basic concept, interdisciplinary science, and study methods. • Understand the types, functions and component of ecosystem and biodiversity, its types, conservation methods, and preservation of ecosystem. • To understand the environmental global problems such as deforestation, desertification, depletion of ozone, global warming, La-nina and El neon. • Understand the role of environmental legislation laws and acts for environment protection and conservation. • Study the environmental planning and management for future and also understand the climatic changes and its effect on environment and human being.
	<p>Geo. 303: Geographical Information System</p>	<ul style="list-style-type: none"> • Understand the all fundamental concept of GIS, potential of GIS, concept of space & time, objectives of GIS, elements of GIS, GIS tasks, history of GIS and GIS applications in different field. • To examine and understand the spatial and non spatial data models and all its functions components and applications in geography. • Extract the knowledge and information about geospatial analysis and database query and GIS data analysis the various concept and problems in analysed in GIS environment. • Understand the concept of map, projections, and coordinate systems and basic of the same for different purposes in geography. • GIS applied in the various kinds of fields, agriculture, populations, watershed planning and land use planning.
	<p>Geo 304: Watershed Management & Planning</p>	<ul style="list-style-type: none"> • Understand the fundamentals concepts related to watershed, significances of watershed development, demarcation of watershed, types of watershed

according to area and shape

- Study about the physical parameters of watershed, channel geometry and basin morphology.
- Understand the hydrological parameters, rainfall, aerial precipitation, evaporation and transpiration, infiltration, run off and drainage.
- Understand the watershed development planning and sample of watershed management and planning for appropriate development of watershed management for water conservation and development.

Geo. 305: Practical of Physical Geography with the Help of G.I.S

- Understand the introduction of GIS software's special reference of ILWIS, to examining the types of GIS software and applications, introduction of menu, tools, page layout and setting, scanning image, import of image in the software.
- To study and understand the image registration and its analysis done in software.
- To understand and prepare the topology of point, line and polygon and understand non spatial data analysis.
- To prepare the different kinds of map using GIS software and also create the profile of relief representation.
- To understand the GPS and its functions, work, types and components for filed survey and make project report using both GPS and GIS software.

Geo. 401: (B) INDUSTRIAL GEOGRAPHY

- Understand study about the industrial geography, its nature, scope, and different study methods.
- To study the locations of industry and their activities primary and secondary and its factors responsible for same.
- To review on world distribution of some industries and selected countries.
- To understand the global nature of industrialization and related problems, methods of measuring the spatial distribution of manufacturing.
- Understand the environmental degradation, industrial hazards and occupational health, manufacturing industry, role and factors affecting on the same.

Geo. 402 (B): Geography of Trade & Transportation

- Understand the concept, development and significance of trade, its types, role of trade in the world etc.
- To understand the trading blocks and trading pacts and international trade, its history, factors influencing,

and India's foreign trade.

- To study the transport and its basics, physical, economical, social and cultural and modes of transportation, land ways, water ways, and airways and all its functions.

- Examining the transportation network, measurement of accessibility, its hierarchies, hinterlands, models of network changes, gravity models and transport network and economic development.

- Understand the problems and urban transport with growth of urban transportation in developing countries

Geo. 403: (A)
Research
Methodology

- Examining the introduction of research, motivation in research, types of research, significance of research, research process and criteria of good research.

- To understand the research problems, selecting research problems, literature review and to study the hypothesis, its types, sources, formation of hypothesis and utility of hypothesis in scientific research.

- To understand the research design, need, features, basic principal and developing of research plan, and sampling design and its basic types, steps, characteristics of sampling design.

- Study about type's data and methods of data collection and study the processing and analysis of data using different statistical methods.

- Understand the interpretation and report writing, techniques, precaution of interpretation, layout of research report, types of reports and oral presentation mechanics of writing a research report.

Geo. 404 (C):
Agricultural
Geography

- Examining the introduction to agriculture, nature, scope, significance and development of agriculture geography, approaches to study.

- Understand the fundamental concept, land use, crops, agricultural production and environment and study the determinants of agricultural activities, physical determinants, and socio-economic determinants.

- To understand the agricultural system its meaning and concept, Whittlesey's classification of agricultural system, types of agricultural, study of the following types of agricultural in respect of area, salient features and their problems.

- Understand the agricultural regionalization and modes in agricultural geography and their classification of agricultural models and some theories.

Geo. 404 (C):
Agricultural
Geography

- Understand the agricultural statistics & land use survey techniques and agrarian revolution, meaning & merit and demerit of green revolution and white revolution.

- Understand the topographical maps, its introduction, types, index, grid reference, and interpretation of topographical maps

- Study the satellite imageries- introduction, calculation of geographical area, interpretation of satellite imageries.

- Understand the aerial photographs- introduction, definition, types, geometry of aerial photographs, methods, measurement of geographical area, elements of photo interpretation using stereoscope.

- Study and understand the techniques of surveying, using dumpy level and the odolite instrument for practical and field work, research, and measurement and management of area.

