DEPARTMENT OF GEOGRAPHY

B. A. Geography

Programme Outcomes

After successfully completing B.A. Geography Programme students will be able to:

PO1: Apply qualitative and quantitative research techniques to gather and analyse dataon social, cultural, and ecological problems.

PO2: Apply clear written and oral communication skills to communicate results of research.

PO3: Demonstrate connections between everyday life at the local scale and the larger economic, social, and/or environmental forces that network them into a global community.

PO4: Evaluate cultural, social, and environmental processes with a particular focus on space and place, critical theory, practical application, analysis and/or social justice.

PO5: Think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.

PO6: Present completed researches, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

PO7: Demonstrate general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.

PO8: Demonstrate acquisition of Weather chart/map, map aerial photograph andImage reading skill.

PO9: Apply Remote sensing concepts, techniques and their application.

PO10: Develop research questions and critically analyse both qualitative andquantitative data to answer those questions using various theoretical and methodological approaches in both physical and human geographies.

PO11: Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.

PO12: Read, interpret, and generate maps and other geographic representations as wellas extract, analyse, and present information from a spatial perspective

Programme Outcomes

After completing B. A. Geography programme will have

PSO1: Demonstrate and understanding of principles and theories of Geography. This include Physical Geography, Economic Geography, Geography of Maharashtra, Geography of Disaster Management and Geography of India.

PSO2: Apply Statistical Techniques of Spatial Analysis.

PSO3: Demonstrate ability to apply knowledge learned in classroom to set and perform simple laboratory experiments in geography.

Course Outcomes

F. Y. B. A. Geography

Course Gg-110(A) Physical Geography (Sem-I)

The student who successfully completes this course can able to:

CO1: Explain Definitions of Physical Geography, Nature and scope of Physical Geography, Branches of Physical Geography and Introduction about the Earth system.

CO2: Discuss Interior of the earth, Wegner's Continental Drift Theory and Davis Concept of Cycle of erosion.

CO3: Identify different Structure of the atmosphere, Heat Balance, Pressure belts and wind system, Forms and types of Precipitation.

CO4: Describe importance of Hydrological cycle, General structure of ocean floor, Waves and Tides, Field Visit for observations geographical places and landforms.

Course Gg-110(B) Human Geography (Sem-II)

The student who successfully completes this course can able to:

CO1: Explain Definitions of Human Geography, Nature and scope of Human Geography and Branches and importance of Human Geography.

CO2: Discuss Factors affecting on distribution of population, Theory of demographic transition and Composition of Indian population.

CO3: Describe Types and pattern of rural Settlements, Urbanisation in India and Urbanisation in Maharashtra.

CO4: Discuss Types of Agriculture, Factors affecting on Agriculture activity and Problems of Indian agriculture.

S. Y. B. A. Geography

Course Gg: 210(A) Economic Geography –I (G2) (Sem-III)

After successfully completing this course, students will be able to:

CO1: Describe Definition, nature and scope of economic geography, Need and significance of economic geography, Economic geography and its relation with social sciences and Approaches of the study of economic geography.

CO2: Explain Introduction and concept of economic activity with problems and prospect, Primary activity, Secondary activity and Tertiary activity.

CO3: Implement Concept of resources, Renewable energy Resources- (Hydroelectricity, Solar energy, Wind energy), Non-renewable Resources- (Coal, Iron ore, and Mineral oil) and Conservation of resources.

CO4: Explain Role of Agriculture in Indian economy, Factors influencing agriculture in India- (Physical, Socio-economic, Political and cultural), Agro-based industries in India- (Dairy industry, Cotton industry) and Agro –Tourism.

Course Gg: 210(A) Economic Geography –II (G2) (Sem-IV)

After successfully completing this course, students will be able to:

CO1: Describe Modes of Transportation and their cost effectiveness Significance of – (Road, Rail, and Air), Treansportation cost of Major types, Types of Trade- (National, International) and International trade of India.

CO2: Explain Factors influencing on location of industries, Weber's theory of industrial location, Major industrial regions in India and Iron and steel industry in India, Sugar Industry in Maharashtra.

CO3: Demonstrate Concept of regional planning and development. Their importance, Objectives of regional planning and Regional and sectoral imbalance in India.

CO4: Explain Concept of rural development, Index of rural development, various schemes of government for rural development, IRD Programme, DPAD Programme

Course Gg: 220(A) Geography of Maharashtra – I (S-1) (Sem-III)

After successfully completing this course, students will be able to:

CO1: Explain Historical and Political Background of the state, Geographical location of State, Adjoining States and Administrative Divisions.

CO2: Describe Geological Structure of Maharashtra, Physical Structure (Mountain, plateau, Plains), Drainage Pattern (East and West flowing rivers) and Major Soil types and Distribution.

CO3: Explain Climatic Regions of Maharashtra, Distribution of Rainfall, Draught prone areas- Problems and Management and Flood areas - Problems and Management.

CO4: Describe Water: Problems in Utilization and conservation, Forest: Types and Conservation, Mineral; Iron ore, Manganese and Bauxite and Power: Hydro, Thermal, Atomic

Course Gg: 220(B) Geography of Maharashtra – II (S-1) (Sem-IV)

After successfully completing this course, students will be able to:

CO1: Explain Importance of Agriculture in Economy of Maharashtra, Major Crops - Wheat, Rice, Jawar, Bajra, Cash Crops and Horticulture - Cotton, Sugarcane, Pomegranate, Grapes, and Problems of agriculture in Maharashtra..

CO2: Describe Population distribution of Maharashtra, Population composition - Sex Ratio, Literacy, Occupational structure, Migration, Rural and Urban Settlements and Potential of Major Cities in Maharashtra – Mumbai, Pune, Nagpur.

CO3: Explain Concept of Rural Development, Parameters of Rural Development, and Schemes For Rural Development, Case Studies – Hivare Bazar and Ralegan Siddhi (Ahmednagar), Patoda (Aurangabad).

CO4: Describe Growth and development of tourism in Maharashtra, Tourism Potential of Maharashtra, Agro-Tourism and Role of MTDC

Gg: 201(A) Practical Geography – I (Scale and Map Projections) (S-2) (Sem-III)

After successfully completing this course, students will be able to:

CO1: Explain Definition of Map, Elements of Map, Classification of Map: - On the basis of scale: - (Small scale, Large Scale), On the basis of function: - (Physical, Cultural) and Use of map.

CO2: Explain Definition of Map Scale, Types of Map Scale- (Verbal Scale, Numerical Scale and Graphical Scale), and Conversion Scale (British and Metric System) (Verbal scale to Representative fraction, Representative fraction into Verbal scale) and Construction of Simple Graphical scale

CO3: Identify different Definition and types of map projection, Basic Concepts of Projection: Latitude, Longitude, Parallel of latitude, Meridian of longitude, Prime meridian, Equator, Direction and Calculation of time basis on meridian and GMT.

CO4: Describe Zenithal Projection, Zenithal Polar Gnomonic Projection, and Conical Projection, Conical projection with one standard parallel/Simple conical projection, Cylindrical Projection, Cylindrical equal area projection and Mercator projection.

Gg: 201(B) Practical Geography – II (Cartographic Techniques, Surveying and Excursion / Village / Project Report) (S-2) (Sem-IV)

After successfully completing this course, students will be able to:

CO1: Explain. Definition of Cartography, Development of cartography- (Traditional b. Modern) and Use of Cartography.

CO2: Explain. Techniques of representation of data, Simple line graph, Simple bar Graph, Pie diagram, Choropleth Map.

CO3: Demonstrate preparation of drawing profile with the help of Dumpy Level.

CO4: Conduct geographical field investigation and report writing.

Course SEC – A Applied Course of Disaster– I (SEC-I) (Sem-III)

After successfully completing this course, students will be able to:

CO1: Explain Disaster, Hazard, Risk, Vulnerability, Resilient, Magnitude, Intensity, Frequency, Duration, Spatial dispersion.

CO2: Describe Concept: Mitigation, Preparedness, Response, Recovery, and Rehabilitation. And Role of Geographers.

CO3: Explain Earthquake: - India and Japan and Flood:- India and Netherland.

CO4: Describe Assignment based on Primary or secondary data on any one Geographical scale, local/ regional/national/ global.

Course SEC – B APPLIED COURSE OF Travel & Tourism– II (SEC-I) (Sem-IV)

After successfully completing this course, students will be able to:

CO1: Explain Basic concepts: Travel & Tourism, Types of Tourist and Tourism and Types of transportation.

CO2: Describe Concept and need of local tourism and Introduction to local tourist places.

CO3: Explain Basic skills: Communication, Time Management, Computer operating, online booking, Net banking, Cancellation of booking and ticket, etc, Framing the tour plan (Itinerary): Budget (Costing), Duration, Insurance, Route and other requirements for individual, family, group and mass level tours and Promotion of tourism.

CO4: Describe one short tour and Preparation of tour report.

T.Y.B.A. Geography

Course Gg 310 A: Geography of Disaster Management-I (G-3) (Sem-V)

After successfully completing this course, students will be able to:

CO1: Describe Meaning and definition of Hazards and Disasters Geographical conditions and disasters and Classification of Disasters.

CO2: Explain Concept of management, Aims and objectives and Pre-disaster management and Post – disaster management.

CO3: Explain Structure of disaster management - Preparedness, Response, Recovery, and Mitigation, and Rehabilitation, Standard operating procedure of disasters management on government level and Role of media.

CO4: Describe Hail Storm and Cloud Burst, Tropical Cyclones and Storms and Droughts and Floods.

Course Gg 310 B: Geography of Disaster Management-II (G-3) (Sem-VI)

After successfully completing this course, students will be able to:

CO1: Describe Earthquakes, Landslides and Tsunami.

CO2: Explain Deforestation, Forest fire and Soil degradation.

CO3: Explain Global warming, Ozone depletion and Marine Pollution.

CO4: Describe Tsunami in Indian Ocean -2004, Fukushima Nuclear Disaster - 2011 and Kedarnath Cloud Burst -2013.

Course Gg: 320 A: Geography of India –I (S-3) (Sem-V)

After successfully completing this course, students will be able to:

CO1: Explain Location and Extent, Historical Background, International boundaries of India and related issues and States and Union territories

CO2: Discuss The Northern Mountains, The North Indian Plains, The Peninsular Plateau and The Coastal lowlands and Islands.

CO3: Explain Himalayan Rivers: Indus, Ganga, Brahmaputra, East Flowing Rivers: Mahanadi, Godavari, Krishna,Kaveri, Major West Flowing Rivers: Narmada, Tapi, Mahi and Minor West Flowing Rivers: originating in Western Ghat.

CO4: Discuss Various Seasons and Weather Associated with them, Types of Soils and its Distribution and Types of Natural Vegetation and its Distribution.

Course Gg: 320 B: Geography of India –II (S-3) (Sem-VI)

After successfully completing this course, students will be able to:

CO1: Explain Religions of India, Languages of India and Major tribes, tribal areas and their problems: Naga and Gond Tribe.

CO2: Discuss Land ways, Airways and Waterways, Role of Transportation in regional development of India and Developments in communication technology.

CO3: Explain Iron ore and Manganese, Coal and Petroleum and Hydro Power and Thermal Power.

CO4: Discuss Significance of agriculture in Indian Economy, Agro Based Industries: Sugar, Cotton and Textile and Agriculture Revolution in India: Green, White and Blue.

Course Gg-301 A: Practical Geography – I (Techniques of Spatial Analysis) (S-4) (Sem-V)

After successfully completing this course, students will be able to:

CO1: Explain Introduction of S.O.I. Topsheet and Relief Representation.

CO2: Identify Interpretation of S.O.I. Topsheets and Data generation.

CO3: Describe Introduction and Interpretation Weather Maps.

CO4: Describe Introduction and Application of GIS and Remote Sensing Techniques.

Course Gg-301 B: Practical Geography – II (Techniques of Spatial Analysis) (S-4) (Sem-VI)

After successfully completing this course, students will be able to:

CO1: Explain Geographical Data and its Basic Analysi.

CO2: Identify Measures of Central Tendency and Dispersion.

CO3: Describe Testing and Application of Hypothesis.

CO4: Describe Field Excursion / Village Survey.

Course SEC 2C Research Methodology – I (Sem-V)

After successfully completing this course, students will be able to:

CO1: Explain Meaning and Objectives of Research, Characteristics of Research, Types of Research and Various Steps in Research Process.

CO2: Describe Introduction of Research Design, Purpose of Research Design and Characteristics of Good Research Design.

CO3: Explain Definitions of Research Problem, Identification of a Research Problem and Technique Involved in Defining a Research Problem.

Course SEC 2C Research Methodology – II (Sem-V)

After successfully completing this course, students will be able to:

CO1: Explain Methods of Data Collection.

CO2: Describe Types of Research Report.

CO3: Explain Techniques of Research Report Writing.

M. A. Geography

Programme Outcomes

After successfully completing M.A. Geography Programme students will be able to:

PO1: Apply qualitative and quantitative research techniques to gather and analyze dataon social, cultural, and ecological problems.

PO2: Apply clear written and oral communication skills to communicate the results of research.

PO3: Demonstrate connections between everyday life at the local scale and the larger economic, social, and/or environmental forces that network them into a global community.

PO4: Evaluate cultural, social, and environmental processes with a particular focus on space and place, critical theory, practical application, analysis and/or social justice

PO5: Think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.

PO6: Present completed research, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

PO7: Demonstrate general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.

PO8: Demonstrate acquisition of Weather chart/map, map aerial photograph andImage reading skill.

PO9: Apply Remote sensing concepts, techniques and their application.

PO10: Develop research questions and critically analyze both qualitative and quantitative data to answer those questions using various theoretical and methodological approaches in both physical and human geographies.

PO11: Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.

PO12: Read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective

Programme Specific Outcomes

After completing **M.A. Geography course students will have**

PSO1: Knowledge of geographical terms, concepts and Theories.

PSO2: Ability of explanation of correlation between geographical facts and processes.

PSO3: Development of map preparation and map reading skills.

PSO4: Understanding of Regional Geography of India.

PSO5: Ability to use geographical research methodologies and research projects.

Course Outcomes

MA Geography Part I

Course GGUT-111: Principles of Geomorphology (Sem-I)

The student who successfully completes this course can able to:

CO1: Explain principal terms, definitions, concept and theories of Geomorphology.
CO2: Describe internal structure of the Earth and Geomorphology and Tectonics.
CO3: Explain Weathering and Mass Movement Processes.
CO4: Describe the Hillslope processes and forms and Models of hillslope evolution.
CO5: Describe the Fluvial Processes and Landforms and River and stream, drainage basin and drainage network patterns.
CO6: Apply knowledge of Glacial Processes andLandforms.
CO7: Apply knowledge of Coastal Processes and Landforms.
CO8: Aeolian Processes and Landforms.

Course GGUT- 112: Principles of Climatology (Sem-I)

The student who successfully completes this course can able to-

CO1: Explain Meteorology and Climatology, Nature and Scope of Climatology, Development of Climatology and Tropical Climatology.
CO2: Describe composition and Structure of Earth Atmosphere
CO3: Explain electromagnetic spectrum, its effect on earth atmosphere and types of insulation.
CO4: Explain basic concepts of air temperature, air pressure and its measurement.
CO5: Explain basic concepts of wind and wind measurement.
CO6: Describe scales of Atmospheric Motion and Models of air circulation.
CO7: Explain basic concepts of hydrological cycle, condensation and evaporation.
CO8: Describe Lapse Rate: normal, environmental, dry adiabatic lapse rate and wet adiabatic lapse rate.
CO9: Explain of Air Masses and Fronts.

Course: GGUT-113: Principles of Economic Geography (Sem-I)

After successfully completing this course, students will be able to:

CO1: Explain principal terms, definitions, concept, nature, scope and recent trends in Economic Geography.
CO2: Discuss Definition and classification of economic activities, and Location of economic activities.
CO3: Explain Significance of natural and human resources in economic development.
CO4: Describe resources and explain significance of natural and human resources in economic development.
CO5: Describe different Transport and Communication.
CO6: Explain Problems and prospects of international trade with reference to India.
CO7: Describe Economic Development in India.
CO8: Role of IT industry in economic development in Maharashtra.

Course GGDT-114: Principles of Population and Settlements Geography (Sem-I)

The student who successfully completes this course can able to:

CO1: Explain Introduction to Population and Settlement Geography
CO2: Describe Population distribution and factors affecting distribution of population
CO3: Identify various Population Growth and trend.
CO4: Evaluate effects of Age and sex structure, Concept of aging of populations and Dependency ratio.
CO5: Level and trends of mortality in India.
CO6: Types: compact, semi-compact, helmeted and dispersed.
CO7: Factors affecting dispersion and nucleation.
CO8: Explain Concept: urban place, urban agglomeration, urban sprawl.

Course: GGUP-115: Practical in Physical and Human Geography (Sem-I)

After successfully completing this course, students will be able to:

CO1: Demonstrate Horton and Strahler methods of stream ordering.

CO2: Describe drainage network analysis and drainage basin relief analysis.
CO3: Demonstrate climatic diagrams.
CO4: Describe climatic classification of Koppen and Thornthwaite.
CO5: Explain the Crop Combination and Crop Diversification.
CO6: Describe Measures of Network Structure.
CO7: Describe Population Indices and Projection.
CO8: Measures of Nucleation and Dispersion.
CO9: Assess the language used to describe Geography experiments and how it can alter perceptions of the method and results.

Course: GGUT-121: Geoinformatics-I (SEM-II)

After successfully completing this course, students will be able to:

CO1: Explain Elements of GIS, hardware & software requirements.
CO2: Explain Importance of Non-spatial: nominal, ordinal, ratio and cyclic.
CO3: Explain Spatial and Non-spatial Data Models.
CO4: Describe the Structuring of Spatial Data.
CO5: Explain Attribute databases: operations from algebraic theory.
CO6: Spatial Databases: map algebra, grid Operations: Local, Focal

Course: GGUT- 124: Agricultural Geography (SEM-II)

After successfully completing this course, students will be able to:

CO1: Explain Approaches: systematic, commodity, regional, recent.
CO2: Explain Significance of agriculture in world.
CO3: Describe the Determinates of Agriculture.
CO4: Explain Agricultural efficiency: Kendall's ranking coefficient, Bhatia's method.
CO5: Describe the Problems and prospects with reference to India.
CO6: Explain the Sustainable Agricultural Development in India.
CO7: Describe the Green revolution in India: problems associated with Indian agriculture.
CO8: Describe the Recent changes in Indian agriculture.

Course: GGUT-128: Industrial Geography (SEM-II)

After successfully completing this course, students will be able to:

CO1: Explain Manufacturing and regional economies.
CO2: Explain Factors of industrial location: physical, economic, political.
CO3: Describe the Models in Industrial Geography.
CO4: Explain Problems and Prospects of Industries in India.
CO5: Describe the Industrial regions of India.
CO6: Explain the Industrial Regions in Western Europe, Anglo-America, Japan and China.
CO7: Describe the Impact of globalization on IT industry in India.
CO8: Describe the Currents Scenario of Industry Sector in India.

Course: GGDT-132: Geography of Disaster Management (SEM-II)

After successfully completing this course, students will be able to:

CO1: Explain Disaster, Hazard, Vulnerability, Resilience, Risks.

CO2: Explain Natural Disasters Causes and effects.

CO3: Describe the Man-made disaster Causes and effects.

CO4: Explain Role of Armed forces, police forces and NGO'S in disaster management.

CO5: Describe the Uses of remote sensing, GIS and GPS in disaster management.

Course: GGDP-133: Practical in Map Projections (SEM-II)

After successfully completing this course, students will be able to:

CO1: Explain Types- Perspective and non- perspective, conventional.

CO2: Explain the Zenithal Projections in Zenithal Polar Gnomonic Projection.

CO3: Describe the Polyconic Projection and International Map Projection.

CO4: Explain the Universal Transverse Mercator (UTM) Projection

CO5: Describe the Conventional Map Projections.

Course: GGDP-133: Practical in Map Projections (SEM-II)

After successfully completing this course, students will be able to:

CO1: Explain Introduction to Statistical Techniques in Geography.

CO2: Explain the Introduction to descriptive statistics.

CO3: Describe the Probability and Probability Distributions.

CO4: Explain the Introduction to inferential statistics and Population and sample.

CO5: Describe the Introduction to bi-variate correlation and regression.

CO6: Explain the Introduction and definition of time.

CO7: Describe the Analysis of data by using appropriate statistical technique.

M. A. Geography Part II

Course GGUT-235 Geoinformatics II (SEM-III)

After successfully completing this course, students will be able to:

CO1: Remote Sensing: definition, concept and principles and History and development of Remote Sensing in India.

CO2: Explain EM Radiation and EM Spectrum.

CO3: Platform: Types and characteristics and Satellites: Geo-stationary and Sun synchronous.

CO4: Describe Sensors: Across track (whiskbroom) and along track (pushbroom) scanning.

CO5: Explain Spatial Resolution, Spectral Resolution, Temporal Resolution and Radiometric Resolution

CO6: Describe Techniques of visual interpretation and interpretation keys

CO7: Types of Aerial Photographs Based on Scale, Geometry of an aerial photograph.

Course: GGUT-236 Geographical Thoughts (SEM-III)

After successfully completing this course, students will be able to:

CO1: Explain the Historical Development of Geographical Though.

CO2: Explain the Dualism in Geography Paradigms.

CO3: Describe the System approaches and Models in Geography.

CO4: Describe the Quantification and application of statistical techniques in Geography.

CO5: Explain the Application in land-use planning, regional planning and urban planning, resource management, environmental management, natural hazards, scenic evaluation.

Course: GGUT-239 Geography of Rural Development (SEM-III)

After successfully completing this course, students will be able to:

CO1: Describe Concept of Rural Development, Geography and Rural Development, Nature and Scope of Rural Development and Amis and Objectives of Rural Development.

CO2: Explain the Factors affecting on Rural Development.

CO3: Apply knowledge of Rural Basic Services and Infrastructures.

CO4: Explain the Rural Development Planning.

CO5: Apply knowledge of Government Policies and Rural Development.

CO6: Explain the Role of Rural Institutions in Development.

CO7: Explain the Application of computer and information technology in Rural Development.

CO8: Explain the Problems and Prospects of Rural development in India.

Course GGUT-243 Watershed Management (SEM-III)

After successfully completing this course, students will be able to:

CO1: Explain Definition, concepts of watershed; watershed management, Principle of watershed management

CO2: Describe Characteristics: Size, Shape, Physiography, Climate, Drainage, Land use, Vegetation, Geology and Soils, Hydrology, Socioeconomics

CO3: Explain Precipitation, interception, infiltration, evaporation, evapo-transpiration, surface runoff, ground water-flow, water budget.

CO4: Describe Water and soil conservation in watershed.

CO5: Describe Importance of watershed management in national development.

Course GGDP-244 Practical in Multivariate Statistics (SEM-III)

After successfully completing this course, students will be able to:

CO1: Explain the Bivariate & Multivariate Analysis

CO2: Describe Addition, subtraction and multiplication of matrices.

CO3: Explain curvilinear bivariate Relationships, Computation, plotting and interpretation.

CO4: Describe the Multivariate Analysi and Computation of multiple regression equations involving two and three independent variables.

CO5: Describe the Importance of Trend surface analysis in the study of spatially distributed data. Examples of TSA.

Course: GGUP- 247 Practical in Economic Geography (SEM-III)

After successfully completing this course, students will be able to:

CO1: Explain the Techniques in Agricultural Geography and Cropping Intensity and Irrigation Intensity

CO2: Explain the Analyses Techniques in Industrial Geography.

CO3: Apply knowledge of Techniques in Trade and Transportation Geography.

CO4: Apply knowledge of Use of Thematic Maps in Economic Geography ii. Use of Choropleth Maps in Economic Geography iii. Use of GIS in Economic Geography.

CO5: Draw DEM based set of profiles at an equal interval.

CO6: Explain the Visit to one Agro-based Unit (Industry) and report writing.

Course: GGUT-249 Geography of India (SEM-IV)

After successfully completing this course, students will be able to:

CO1: Explain Geographical and relative location of India, Frontiers of India and Strategic Significance and Geological Structure.

CO2: Describe Main physiographic divisions & their importance.

CO3: Explain the Drainage Systems, Himalayan drainage systems, peninsular drainage system and West Flowing Rivers.

CO4: Apply knowledge Climate Main Seasons & Associated weather conditions.

CO5: Describe Soil Major Soil types and their distribution in India.

CO6: Explain Forest Deforestation and conservation of forest.

CO7: Describe Distribution and Utilization of Minerals and Distribution and

Utilization of Energy Resources

CO8: Explain Distribution and Production of Major Crops and Agriculture revolution in India.

CO9: Describe Major Industries in India, Major Industrial Regions in India and Problems of Industrial development.

CO10: Explain Growth and distribution of population in India and Composition and structure of Population.

Course: GGUT–250 Oceanography (SEM-IV)

After successfully completing this course, students will be able to:

CO1: Explain Definition and Meaning of Oceanography.

CO2: Describe World Oceans, their origin and distribution.

CO3: Explain the Ocean Floor Relief of the Ocean Bottom.

CO4: Explain the Factors affect temperature on water and distribution.

CO5: Describe Correlation and age determination.

CO6: Explain Natural resources- gaseous, liquefied and solid chemical parameters.

CO7: Describe Oceanic Pollution Causes and measures

Course: GGUT – 251 Research Methodology (SEM-IV)

After successfully completing this course, students will be able to:

CO1: Explain the Introduction to Research Methodology and Types of Research.

CO2: Describe Research Design – definition, Purpose of a Research Design and Characteristics of Good Research Design.

CO3: Explain the Definitions of the Research Problem, Identification of a Research Problem and Technique involved in defining a problem.

CO4: Explain the Types or method of sampling.

CO5: Describe Methods of Data Collection.

CO6: Explain Measure for Central Tendency and Dispersion and Correlation and Regression Analysis, Time series analysis.

CO7: Describe Technical writing and reporting of research and Types of research report

CO8: Explain Research ethics, plagiarism and funding agencies.

Course: GGUT – 254 Political Geography (SEM-IV)

After successfully completing this course, students will be able to:

CO1: Explain the Historical Development of Political Geography.

CO2: Describe Definition of Nation and State and Difference between Nation and State

CO3: Explain the Definition of Frontiers & Boundaries ii. Difference between frontiers & boundaries.

CO4: Explain the Geopolitical importance of Indian Ocean.

CO5: Describe Contemporary Issues related to India and Problems of Border States of India.

Course: GGDP – 256 Practical in Watershed Analysis (SEM-IV)

After successfully completing this course, students will be able to:

CO1: Explain the Delineation of Watershed/Drainage Basin.

CO2: Explain the Measurement and calculation of Stream length, Mean stream length, and Stream length ratio.

CO3: Explain the Explain the Relief Aspects of Drainage Basin.

CO4: Explain the Software based Delineation of watershed (DEM based).

Course: GGUT-258 Geography of World (SEM-IV)

After successfully completing this course, students will be able to:

CO1: Explain the Origin and Evolution of the Earth- Big-bang theory and Geological Time scale.

CO2: Explain the Regional geography of Europe, North America, South America, and Africa and Australia.

CO3: Describe the World contemporary issues.

CO4: Describe the 21st century challenges and opportunities in the world.