

COURSE OUTCOME (CO)

B.A. THREE YEARS (HONOURS) DEGREE COURSE IN GEOGRAPHY [PART-I, PART- II, PART-III]

PART-I

PAPER-I (THEORY): GEOTECTONICS, GEOMORPHOLOGY AND HYDROLOGY

1.0: GEOTECTONICS-I

1. This unit comprises of knowledge on structure and development of the earth, especially of its crust and mantle. Students learn the geographical ideas concerning development of the crust, tectonic features in regional and global scale and formation or deformation of structural features.

2.0: GEOTECTONICS-II

1. The continuous mechanism of the Continental Drift explains the students about the Origin of Continents and Oceans. Also they learn the methods to identify various rocks at different time scale.

3.0: GEOMORPHOLOGY-I

2. Theories of Davis, Penck and Hack on Cyclic and Non-Cyclic concept of Landscape evolution helps in understanding the content and importance of geomorphology. Therefore, students learn the landform evolution and development as a result of endogenetic and exogenetic forces.

4.0: GEOMORPHOLOGY-II

1. The study of exogenetic processes of fluvial, Aeolian, Coastal and Glaciers leading to the formation of different landforms on the surface of the earth. This has in widening the thoughts on how natural landforms differ from one region to another.

5.0: GLOBAL HYDROLOGY

1. The water circulation plays an important role in distribution of the energy on earth. As water is a one of the free gift of nature, it should be judiciously used.

PAPER- II (PRACTICAL): CARTOGRAPHIC TECHNIQUES IN GEOGRAPHY

1.0: SCALES AND CARTOGRAMS

1. The course study helps to develop the cartographic techniques and skill, to draw different types of scales which can be applied for calculating distance between two given places.

2.0: DIAGRAMS AND MAPPING TECHNIQUES

1. Based on calculations relevant graphical representations are taught so that the students develop the idea of comparative study on data of any given place.

3.0: MAP PROJECTION

1. This is another method of drawing suitable maps based on the latitudes and longitudes. Each map projection have its own advantages, disadvantages and limitations

4.0: SURVEYING AND MAPPING

1. With the help of instruments students learn to measure the area, height, distance, and the level of the ground surface.

PART-II

PAPER-III (THEORY): CLIMATOLOGY, SOIL GEOGRAPHY AND BIOGEOGRAPHY

1.0: CLIMATOLOGY-I

1. To learn about the natural phenomenon that result in the change in temperature, genesis of monsoon and the importance of planetary winds which are distributed all over the globe.

2.0: CLIMATOLOGY- II

1. The main objective of the study is to develop the sense of awareness on the current issues on climate change, evidences, causes and future problems.

3.0: SOIL GEOGRAPHY

1. To understand the physical and chemical properties and the importance of soil. Various methods to be followed for the conservation of soil from the excess exploitation by human activities.

4.0: BIOGEOGRAPHY- I

1. Learning the meaning of Biosphere and Biogeography is important because the Energy Sources, Law of Energy Exchange, Food Chains and Flow of Energy are the combined energies that make a Biosphere which is studied under Biogeography.

5.0: BIOGEOGRAPHY-II

1. To learn the impact of climate and soil on distribution of vegetation and animals. Wildlife conservation of crocodiles and tigers with special reference to West Bengal is an issue of concern.
2. Also to study the importance of the Tidal Mangrove Forest of India (Sundarban) and its biodiversity.

PAPER-IV (PRACTICAL): ANALYTICAL TECHNIQUES IN GEOGRAPHY

1.0: DATA COLLECTION AND REPRESENTATION

1. This includes the learning of fundamental statistical concepts along with some of the basic application. This helps the students to summarize data visually and numerically. This increases the ability to organize data for appropriate statistical analysis and are able to represent it graphically.

2.0: DATA ANALYSIS AND INTERPRETATION

1. Data analysis and interpretation is considered vital because selection of a correct method for graphical representation along with relevant explanation makes the work meaningful and complete. Therefore, in this unit the students learn to calculate and interpret the given data.

3.0: DATA RECORDING, AREA MEASUREMENT AND SPECIMEN IDENTIFICATION

1. Take data recordings from the Barometer, Hygrometer and Maximum and minimum Thermometer and understand the atmospheric pressure and temperature for the day.
2. Soil testing in laboratory is done specifically for identifying the Soil PH and Organic Carbon. They learn its importance as this can help in improving the soil condition of agricultural fields for better yield.

4.0: MORPHOMETRIC ANALYSIS AND INTERPRETATION OF TOPOGRAPHICAL MAPS: PLATEAUS AND PLAIN REGIONS

1. With the help of topographical maps students learn different symbols with which they interpret the original landforms. They learn to analyze and understand about the physical and cultural relationship of a particular area.

PART- III

PAPER- V (THEORY): NATURE OF GEOGRAPHY

1.0: DEVELOPMENT OF GEOGRAPHY

1. To learn about the Scope and Content of Geography. Also they come to know the development of geography in the Ancient, Medieval and in the 20th century.

2.0: DEVELOPMENT OF SCHOOLS OF SCHOOL OF THOUGHT IN MODERN GEOGRAPHY

1. In context to Modern Geography students learn the country wise developments in geography by research scholars and philosophers.

3.0: CONCEPTS AND TRENDS IN GEOGRAPHY

1. Concepts of Determinism, Positivism, Neo-Determinism, Empiricism and Positivism are some of the important concepts to understand the Nature of Geography.

4.0: APPROACHES TO REGIONAL STUDIES

1. When students study the concepts and various trends in geography, they easily understand how the approaches are developed.

5.0: ENVIRONMENT AND DEVELOPMENT

1. By studying the relationship between environment and urban development students understand the various region wise development according to the environmental condition.

PAPER-VI (THEORY): ECONOMIC AND SOCIAL GEOGRAPHY

1.0: RESOURCE

1. It is very important that students are made aware of the renewable and non-renewable resources and at individual level make proper use of these resources and also learn its conservation methods.

2.0: ECONOMIC ACTIVITY

1. For the development of industries and agricultural activities it is important to have detailed knowledge about the region, favorable conditions and policies framed by the government.

3.0: SOCIETY AND CULTURE

1. To gain wider knowledge of various societies and different characteristics of culture of the world.
2. Also to know how culture influence people's perception of a place or region.

4.0: SETTLEMENT

1. This has been broadly categorized under two heads i;e Urban and Rural Settlement. In this unit the settlement pattern and the reasons are also discussed.

5.0: POPULATION

1. The reasons for difference in population density, high or low fertility and mortality rates in various geographical region are easily understood by the students as they can apply relevant theories and concepts that lead to such variations.

PAPER-VII (THEORY): GEOGRAPHY OF INDIA

1.0: INDIA: PHYSICAL ASPECT

1. To learn about the evolution of Peninsula and Extra-Peninsula rivers and also the patterns of drainage. When the physical aspects are known students get clear idea about the geology, drainage, climate and soil condition and are able to relate with surrounding physical scenario.

2.0: ECONOMIC ASPECTS

1. The various agricultural and industrial policies that were framed and amendments which were made since Independence for the overall developments of the economy.

3.0: SOCIO – CULTURAL ASPECTS

1. Theories on Population Growth, different language groups and their spatial distribution, caste and social morphology with special reference to India are some of the vital topics which describes the socio-cultural aspects of a region or country.

4.0: WEST BENGAL

1. As Physical Geography is one of the main branch in Geography, therefore, physiography in context to West Bengal is explained in details. This becomes easy for the learners to understand the landscape more precisely.
2. The flood and drought cause damage to both life and property at the same time. Students learn about the measures and management which are useful for every individual
3. The importance and need of a healthy environment.

5.0: REGIONAL ASPECT

1. Every region is different from the other based on physical and climatic conditions (such as Chotanagpur Plateau, West Bengal, and Malabar Coast). Based on the location of these places a comparative study is done on the socio-economic and cultural scenario.

PAPER-VIII (PRACTICAL): APPLIED GEOGRAPHICAL TECHNIQUES AND FIELD REPORT

1.0: ANALYSIS OF GEOLOGICAL MAPS

1. In this unit with the help of geological maps which shows the geological features such as rock structure, bedding plane, strike and dip etc are well traced out. This is helpful for the students in their future prospects as they can opt for specialization in geological studies.

2.0: ANALYSIS OF CLIMATIC DATA AND MAPS

1. Construction of Station Model and interpretation of Weather Maps helps to analyze climatic data and can understand the climatic condition of any area.

3.0: COMPUTER APPLICATION, REMOTE SENSING AND GIS

1. With the advent of new and advanced technology, the importance of geospatial science has increased. The content of this unit such as Data Entry, Remote Sensing, GIS are the modern cartographic techniques which can provide job opportunities to students.
2. In recent years GIS and Remote Sensing has emerged as an emerging career option. The tools and techniques can be widely used in the fields of agriculture, irrigation, forestry, transportation and others.

4.0: FIELD REPORT

1. The purpose of a field report is to describe the observation of people, place or events and to analyze that observed or collected data.
2. A field report is always based on a selected topic. Students apply the statistical techniques and with the help of computer applications a field report is prepared.

PROGRAMME OUTCOME (PO)

1. The course structure of B.A. Honours Degree course in Geography aims at understanding the different branches of geography.
2. Starting from the origin of the earth followed by the landscape evolution and global hydrology provides deeper knowledge.
3. Cartographic techniques, Analytical techniques and the modern method of Applied geographical techniques further provides a wider spectrum to understand the subject, its importance, relevance and application.
4. The importance of man and environment relationship and methods of conservation are equally important.
5. To learn the techniques of data collection, data analysis and interpretation.
6. To know about the development of geography from the ancient periods up till the 20th century.
7. Economic geography is the study of economic activity and factors affecting them.

8. The use of software especially for Remote Sensing and GIS has developed more interest and skills among students. Preparing a field report is another integral part of the prescribed syllabus.
9. The methods of collecting data and interacting with the people helps to understand the environment and society closely.

COURSE OUTCOME (CO)

B.A. THREE YEARS (GENERAL) DEGREE COURSE IN GEOGRAPHY [PART-I, PART- II, PART-III]

PART-I

PAPER-I (THEORY): PHYSICAL GEOGRAPHY

1.0: GEOTECTONICS

1. The content of this unit is Geological history of the earth, internal structure of the earth, the Continental Drift theory and the Plate tectonics. This provides the basic knowledge about geotectonics – formation of different landmass.

2.0: GEOMORPHOLOGY

1. This is with reference to the process of weathering and Mass wasting. The fluvial processes and formation of landforms. The theories of Landscape Evolution by Davis and Hack helps to understand the cycle of landscape evolution.

3.0: CLIMATOLOGY

1. To know about the layering in the atmosphere, its importance and impact of circulations in the atmosphere.
2. Koppen's Classification of climate of the World and India is an important part under this unit to understand the global circulations in the atmosphere.

4.0: SOIL GEOGRAPHY

1. The properties of soil, soil formation, causes of soil erosion and methods of soil conservation is covered under this unit as it is important for students to understand the seriousness of soil conservation.

5.0: BIOGEOGRAPHY

1. Biogeography includes the entire ecosystem. The impact of climate change and problems of deforestation and conservation of forest is topic of concern and practice.

PART-II

PAPER-II (THEORY): GEOGRAPHICAL THOUGHT, ECONOMIC AND SOCIAL GEOGRAPHY

1.0: GEOGRAPHICAL THOUGHT

1. The contributions of Humbolt and Ritter to the discipline of geography is of great importance. Also the concepts of Determinism and Possibilism helps to understang the scope and content of geography.

2.0: ECONOMIC GEOGRAPHY

1. This unit is a comparative study of agricultural and industrial regions of India and the USA.

3.0: POPULATION GEOGRAPHY

1. This unit lays emphasis on growth, distribution and density of population of the world. Also the types of population migration with reference to India has also been included. Population explosion and food crisis is another vital topic of concern.

4.0: HABITAT, SOCIETY AND ECONOMY

1. The major racial groups and their world distribution. Major linguistic groups and their distribution in India. The Bushmen of Africa and the Pygmies are the content of this unit. This helps to understand the different habitats, society and the economy.

5.0: SETTLEMENT GEOGRAPHY

1. This unit helps to understand the rural and urban types and pattern of settlement in India. The characteristics of urban agglomeration, metropolis and megalopolis, also the functional classification of towns to understand the reasons of variations in growth and density in different areas.

PAPER- III (PRACTICAL): CARTOGRAPHIC TECHNIQUES IN GEOGRAPHY

1.0: SCALES AND CARTOGRAMS

1. Statistical data are represented by using various geographical techniques such as the linear scale, comparative scale, proportional diagrams etc. along with interpretation which helps to understand the ground information more clearly.

2.0: MAPPING TECHNIQUES AND MAP PROJECTION

1. This is an integral part of geography. The students learn the mapping techniques and map projections, its advantages and limitations.

3.0: MAP INTERPRETATION

1. Map interpretation is another important part because it helps the students to pen down the information gathered after processing the data. Topographical maps and weather maps are used in this unit.

4.0: SURVEYING

1. The plain table survey, use of prismatic compass and the dumpy level is used to understand and calculate the undulating surface of the ground.

5.0: FIELD REPORT AND LABORATORY NOTEBOOK

1. A field report on “ Socio- Economic aspects” of a selected area is prepared using the cartographic techniques mentioned above. Students gain knowledge and develop skills. From the stage of collecting data to the completion of the field report, makes it easier to understand the techniques and the application of cartogram.

PART-III

PAPER-IV: GEOGRAPHY OF INDIA AND ANALYTICAL TECHNIQUES IN GEOGRAPHY

GROUP-A (THEORY), GEOGRAPHY OF INDIA

1.0: PHYSICAL ASPECTS

1. The physical aspects with reference to India are the river systems, structure and relief. Also the climatic characteristics and natural vegetation has been covered in this unit.

2.0: SOCIO- ECONOMIC ASPECTS

1. The socio- economic aspects included in this unit are power resources, the locational factors of iron, steel and aluminium industries, population growth and distribution.

3.0: REGIONAL ASPECT

1. With special reference to geography of India, selected areas such as Kashmir Himalaya, Deccan Trap, Bengal Delta and Marusthali helps to understand the physiography of India.

**PAPER- IV: GEOGRAPHY OF INDIA AND ANALYTICAL TECHNIQUES IN
GEOGRAPHY**

GROUP- B (PRACTICAL); ANALYTICAL TECHNIQUES IN GEOGRAPHY

1.0: STATISTICAL TECHNIQUES

1. Processing data using statistical methods in geography (e.g., frequency distribution, measure of central tendency etc.,) helps the students to understand its importance and relevance in the subject.

2.0: LABORATORY WORK

1. This includes the methods and techniques to identify different rocks and minerals. Also students learn about the fertility and type of soil to be used for various crops by the soil kit (soil PH).

3.0: LABORATORY NOTE BOOK AND VIVA- VOCE

1. A laboratory note- book is prepared based on the topics mentioned above.

PROGRAMME OUTCOME (PO)

1. The geological time-scale and geological history of the earth is the basic knowledge to be acquired in Physical Geography.
2. To learn about the evolution of landscape.
3. The reasons, importance and effects of the global circulation in the atmosphere.
4. Importance of soil and forest conservation and to develop a sense of self-consciousness.
5. Contributions of eminent scholars to the discipline of geography and its scope.
6. To understand man's economic achievement in terms of production and consumption in the light of the environment.
7. To understand the various facets pertaining to the spatial variation in the distribution of the human population across the globe.
8. It also aims to study the size, forms, functions and regional association of human settlement and trace their growth and pattern of distribution.
9. Cartographic techniques and field work helps in incorporating the analytical and statistical techniques and to bring forth the final result.

B.A. PART-I (HONOURS) IN GEOGRAPHY, CBCS

SEMESTER -I

CC-1: GEOTECTONICS AND GEOMORPHOLOGY (THEORY)

UNIT-I: GEOTECTONICS

1. This course is framed to identify the age and source of crustal rocks. It also includes the study of major tectonic events of the Earth's crust, deformation, kinematics and stability. This helps the students to recognize the historical development of ideas and scientific breakthrough associated with formulation of the Plate Tectonic Theory.

UNIT-II: GEOMORPHOLOGY

1. Emphasis is placed on the mechanism of geomorphic processes and on the relationship between properties of earth materials and the forces applied to them by gravity, wind, ice water, waves and humans.
2. Various landform features formed by the agents of geomorphic process has helped the students to identify the landforms and the processes and factors that work behind the formation of various landforms.

***CC-2: CARTOGRAPHIC TECHNIQUES AND GEOLOGICAL
MAPS (THEORY AND PRACTICAL)***

CC-2 (THEORY)

1. Students learn the classification and various types of maps such as Cadastral maps, Topographical maps, Thematic maps etc It is helpful to students as they can interpret the maps and understand the settlement pattern, drainage pattern, vegetation, transport and communication network of any region or area.
2. Types and characteristics of selected rocks and minerals are taught so that they can develop the skill of identifying the rocks and minerals. Some of the techniques of identification are colour, structure, texture etc.

CC-2 (PRACTICAL)

1. Cartographic techniques is the method of preparing maps based on calculation and geological maps study details with the identification of geological features.
2. Geography, being a practical based subject, students learn the actual procedure and technique of drawing and interpreting maps and constructing projections. Also they understand its relevance advantages and disadvantages.

SEMESTER -II

CC-3 (THEORY): HUMAN GEOGRAPHY

UNIT-1: NATURE AND PRINCIPLES

1. Human geography deals with the people and the social environment created by them.
2. It is the study of evolution of humans, concept of race, ethnicity and society.
3. Knowing about the concept of Culture, Cultural Diffusion, Convergence and Cultural realms of the world, learners know how it can bring up more development in any region.

UNIT-2: SOCIETY, DEMOGRAPHIC AND EKISTICS

1. This unit discusses about the evolution of human from hunting and gathering period till the present modern time.
2. How humans have made themselves compatible with the extreme types of climate such as the Arctic and Hot Desert regions.
3. Students' also learn about the importance of resources. The increase in the population may result in the depletion of natural resources. Therefore, countries with overpopulation have to make judicious use of these natural resources.
4. The types and pattern of rural settlement and the functional classification of urban settlements highlight the reasons for the arrangement of such settlement.

CC- 4: CARTOGRAMS, SURVEY AND THEMATIC MAPPING

(THEORY AND PRACTICAL)

CC-4: (THEORY)

1. Concept of Cartograms and Thematic Maps, Concept and utility of Isopleths, Choropleth, Climograph, Hythergraph and Ergo graph are the important topics covered under this unit.
2. The techniques of preparing and interpreting demographic charts and maps are also taught.
3. The measurement of height, distance and level of the ground are calculated with the help of survey equipment such as Dumpy Level, Transit Theodolite and Prismatic Compass.

CC-4: (PRACTICAL)

1. Diagrammatic representation of data (Star diagram, Age-Sex pyramid, Pie diagram, Circles, Dots and Sphere Isoclines and Choropleth methods) helps in the interpretation and reflects a clear picture of a place based on any given data.

2. Countering by Dumpy Level and Prismatic Compass along with determination of height of objects using Transit Theodolite (accessible and inaccessible base) students can calculate the distance between two given points and can see how smooth or undulating the surface is. This methods are generally used before laying railway tracks, making roadways and bridges.

B.A. PART-II (HONOURS) IN GEOGRAPHY, CBCS

SEMESTER -III

CC-5(THEORY): CLIMATOLOGY

UNIT-1: ELEMENTS OF THE ATMOSPHERE

1. Students learn about all the elements which form the atmosphere. Also they learn about the Ozone layer which protects the earth from the ultra violet rays.
2. The effects of Green House and the gasses which are released in the atmosphere are one of the cause for the depletion of the protective Ozone layer. Therefore, awareness among every individual is necessary.

UNIT-2: ATMOSPHERIC PHENOMENA, CLIMATE CHANGE AND CLIMATIC CLASSIFICATION

1. Based on different theories and atmospheric phenomena students learn the evidences and causes of climatic change.
2. The reasons for stability and instability in weather and rise in temperature every year are matters of concern, as it directly or indirectly affect the living being on the planet. Therefore, it is important to build awareness and concern among students.

CC-6: STATISTICAL METHODS IN GEOGRAPHY (THEORY AND PRACTICAL)

UNIT – 1 & 2 (THEORY)

1. Students learn the importance and significance of Statistics in Geography.
2. Geographers use statistical techniques to make generalizations related to complex spatial patterns, describe and summarize spatial data etc The learners acquire the skill and method of collecting, compiling, calculating the data and apply relevant statistical techniques.
3. It is also useful for those engaged in the field of academic research.

CC-6: STATISTICAL TECHNIQUES IN GEOGRAPHY (PRACTICAL)

1. The computed statistical data are graphically represented and interpreted. Graphical representation of data of any study area results in better analysis and presentation of data.
2. The primary goal of teaching statistical techniques is to calculate data into easy understandable summaries.

CC - 7: GEOGRAPHY OF INDIA

UNIT-1: GEOGRAPHY OF INDIA

1. Along with knowing the physiography of the country, students' acquire deeper knowledge of India and the infinite variety of caste, and creed, language and tribes.
2. Over the years efforts and policies have been laid down by the government for the development in the agricultural sector as well as industrial development. Based on the current scenario students' can make a comparative study of the rate of development in the country in various sectors.

UNIT-2: GEOGRAPHY OF WEST BENGAL

1. This unit particularly deals with the state of West Bengal. Its content is about the physiographic divisions and forest and water resource. Students learn the importance of water resource and how it is being contaminated, government's role in dealing with such problems.
2. Mining, setting up of new industries and depletion of forest cover to accommodate the growing population has been a major point of concern. This has imposed a negative impact on the biodiversity of West Bengal.

SKILL ENHANCEMENT COURSE

SEC-1(A): REMOTE SENSING

SEC-1(A): (PRACTICAL)

1. This unit is particularly framed for students to explore and understand the space in much detailed and digital way.
2. Remote Sensing is about collecting information with the help of satellites, sensors used and platforms. Principles of image interpretation is a vital part.

SEMESTER-IV

CC-8 (THEORY): REGIONAL PLANNING AND DEVELOPMENT

UNIT- 1: REGIONAL PLANNING

1. Regional Planning deals with the efficient placement of land use activities, infrastructure and settlement growth across a larger area of land .It also includes formulating of laws that will guide the efficient planning and management of such said region.
2. Regional Planning also helps in reducing the conflicts and competition for resources between cities and region.
3. Students develop specialized knowledge in Regional Planning which provide a range of professional skills such as designing the layout of a region and laying development plans.

UNIT-2: REGIONAL DEVELOPMENT

1. The study on Regional Development focuses on the socio- economic and Environmental Development of regions with a view to train students to take qualified, professional, expert, and managerial positions in the sphere of complex socio- economic and environmental regional development.
2. Students acquire the knowledge and understand the reasons which are the cause of regional imbalance in India. They learn to give logical suggestion for a region's development.

CC-9 (THEORY): ECONOMIC GEOGRAPHY

UNIT – 1: CONCEPT AND APPROACHES

1. Economic geography is the study of interdependence of production and development of a region.
2. Students understand the reasons why certain regions are outstanding in the production and exportation of various articles and why others are significant in the importation and utilization of these things.

UNIT -2: ECONOMIC ACTIVITIES

1. Students learn the importance of Economic activities in Primary, Secondary and Tertiary level which leads to economic growth of a country.

CC – 10: ENVIRONMENTAL GEOGRAPHY

(THEORY)

1. Students acquire the knowledge on the inter-dependent relation between man and environment.

2. This spreads awareness on the effects that are caused due to Environmental Degradation and Pollution.
3. Students also learn Urban Environment issues which are related to Waste Management.

(PRACTICAL)

1. A field survey is conducted based on a questionnaire. Students collect primary data and extract the environmental problems of the selected area.

SEC- 2: FIELD WORK (PRACTICAL)

1. Students learn the importance of preparing a field report as it helps in getting a clear view of the socio- economic scenario of the area and can understand the reasons for the present condition of the study area.

B.A. PART-III (HONOURS) IN GEOGRAPHY, CBCS

SEMESTER – V

CC – 11: RESEARCH METHODOLOGY AND FIELD WORK

UNIT- 1: RESEARCH METHODOLOGY (THEORY)

1. The techniques of writing scientific reports has been highlighted. From the initial stage to the final completion of a project or fieldwork has been explained in details.
2. The first unit is framed to understand the significance of literature review in research, followed by objectives, hypothesis and problems of a research.
3. Techniques of preparing notes, references, bibliography, abstract and keywords.

UNIT -2: FIELD WORK (PRACTICAL)

1. Field work is an essential component in geography. This helps the students to develop subject knowledge and perspective.
2. Pre- field, field and post- field preparations has been included in this unit. The field work includes selection of a study area, field techniques and tools such as questionnaire, interview, photos, collection of samples and post – field tasks.
3. Based on the above mentioned techniques, students prepare a field report of a selected area. The theoretical information along with the survey on ground provide exposure and also helps in developing skills.

CC – 12: REMOTE SENSING AND GIS

UNIT- 1: REMOTE SENSING (THEORY)

1. This unit is particularly framed for students to explore and understand the space in much detailed and digital way.
2. Remote Sensing is about collecting information with the help of satellites, sensors used and platforms. Principles of image interpretation is a vital part.

UNIT -2: GIS and GNSS (PRACTICAL)

1. The unit lays special importance of the use of GIS techniques and its application used for flood management and urban sprawl.
2. Principals of GNSS positioning – uses and waypoint collection method is equally an important topic.
3. Students are facilitated with computer labs. The software used is Q GIS. Geo-referencing of scanned maps, preparation of FCC using IRS LISS- 3 data and preparation of thematic maps etc. has helped in inculcating more interest in the subject.

DSE-1(THEORY): CULTURAL AND SETTLEMENT GEOGRAPHY

UNIT – 1: CULTURAL GEOGRAPHY

1. Emphasis has been laid on development of Cultural Geography, Cultural Landscape, Cultural Segregation, Cultural Diversity, and Major Races of the world, its distribution and characteristics.

UNIT – 2: SETTLEMENT GEOGRAPHY

1. The difference between settlement types and pattern, characteristics of rural settlement, its site and morphology has been discussed in details.
2. Urban morphology, urban growth, urban agglomeration and mega city has also been covered under this unit.
3. Functional Classification of cities by Harris and Nelson included in this unit is of equal importance to students.

DSE – 2 (THEORY): POPULATION GEOGRAPHY

UNIT – 1 & UNIT – 2: POPULATION GEOGRAPHY

1. Theories of population growth: Malthusian Theory and Marxian Approach, Demographic Transition Model its relevance in the trends of population growth is of utmost importance in the present scenario.
2. Distribution and Density of population with respect to Migration, occupational structure, fertility and mortality are discussed under this unit.
3. The Human Development Index (HDI) helps to understand the achievements in the social and economic dimensions.
4. Contemporary Issues in population, such as Health and Unemployment highlights the quality and economic status of the growing population.

SEMESTER- VI

CC – 13(THEORY): EVOLUTION OF GEOGRAPHICAL THOUGHT

UNIT- 1 & UNIT – 2:

1. Geography in Ancient period and its development in the medieval period.
2. Development of mapping and knowledge about the world Regional Geography.
3. Classical Geography in the 19th Century by Humbolt and Ritter.
4. Quantitative Revolution and its critique.
5. Indian contribution to Geography.

CC- 14: DISASTER MANAGEMENT (THEORY AND PRACTICAL)

UNIT-1 & UNIT-2

1. In this unit special emphasis has been given to understand the Causes, Consequences and Management of pre and post disaster.
2. Preparedness, Resilience and Capacity building is very essential to overcome the trauma faced by the people during any kind of hazard or a disaster.
3. Hazard mapping helps to learn about the vulnerable areas affected by natural calamities each year.

DSE – 3 (THEORY): RESOURCE GEOGRAPHY

UNIT- 1 & UNIT-2

1. Emphasis has been laid on the problems of resource depletion with special reference to forests, water and fossil fuels as these are vital and needs to be conserved for social and economic wellbeing.

2. Distribution, problems and management of energy resources, Sustainable resource development and Contemporary energy crisis and future scenario helps to understand that we have reached to an alarming stage.

DSE-4 (THEORY): SOIL AND BIO GEOGRAPHY

UNIT -1 & UNIT- 2

1. To understand the development and characteristics of Soil profile, its physical and chemical properties.
2. Also the fertility of soil, soil degradation and management is also important which has been addressed under this unit.
3. Bio geography with special reference to Biosphere and Laws of energy exchange, bio geo chemical cycle and threat to bio diversity, its causes, consequences and conservation is important to understand the importance of a healthy environment.

PROGRAMME OUTCOME

1. Students develop an understanding of concepts, theoretical frameworks, Perspectives and methods of inquiry.
2. To know about the forces (endogenetic and exogenetic) that lead to the formation of various landforms.
3. To be able to identify and interpret landforms and geomorphic processes from topographical and geological maps.
4. Learn to analyze data, apply statistical techniques and lay in a graphical representation to make the given data easier to understand and interpret.
5. It provides a better understanding of evolutionary time frames. The geographic distribution of plants and animal species and ecosystem over space and time.
6. To develop a sense of awareness and concern for the environment, increasing population, depletion of natural resources, the global climatic change etc., and embrace the methods of sustainable development.
7. Students' acquire deeper knowledge of India and the infinite variety of caste, and creed, language and tribes.

B.A. PART-I GEOGRAPHY-(GENERAL & GENERIC), CBCS

SEMESTER- I

CC-1: GEOMORPHOLOGY AND CARTOGRAPHY

UNIT- 1: GEOTECTONICS AND GEOMORPHOLOGY (Theory)

1. Types of weathering and related landforms, lithosphere, plate tectonics and its associated landforms are covered under this unit to have a better understanding of geotectonics.
2. Geomorphology is associated with the various landforms that are formed on the earth's surface. Landforms developed in the arid regions, glaciated regions and the fluvial cycle of erosion by Davis and Penck are some of the important topics of this unit.

UNIT-2: SCALES AND CARTOGRAMS (Practical)

1. Scales and Cartograms is an important part of geography. Diagrammatic representation of data and its interpretation helps in better understanding of the ground.

SEMESTER- II

CC-2: PHYSICAL ENVIRONMENT AND SURVEYING

UNIT-1: CLIMATOLOGY, SOIL AND BIOGEOGRAPHY (Theory)

1. This unit includes the elements of weather and climate, forms of precipitation, tropical , temperate cyclones and climatic classification by Koppen.
2. Physical and chemical properties of soil, soil forming factors, definition of biosphere and biogeography is equally important to understand the physical environment in geography.

UNIT-2: SURVEYING AND LEVELLING (Practical)

1. As a part of the prescribed syllabus it is important for students to learn about the applicability of surveying and levelling.

SEMESTER- III

CC-3: HUMAN GEOGRAPHY AND MAP STUDYING

UNIT-1: HUMAN GEOGRAPHY (Theory)

1. The man- environment relationship with reference to the Eskimos, Space and Society is covered under this unit.
2. Population growth, types of population migration and world population distribution and composition helps to understand the contents of human geography.

UNIT-2: MAP PROJECTION AND MAP INTERPRETATION (Practical)

1. This is another method of drawing suitable maps based on the latitudes and longitudes. Each map projection have its own advantages, disadvantages and limitations
2. A detailed study of the map helps students to interpret the information.

SKILL ENHANCEMENT COURSE

SEC-1: REMOTE SENSING

UNIT-1: REMOTE SENSING (Practical)

1. The definition, development, platforms and types of Remote Sensing is the content of this unit.
2. Aerial photography, Satellite Remote Sensing, interpretation and application of Remote Sensing helps the students to develop a wider spectrum of knowledge.

SEMESTER-IV

CC-1: ENVIRONMENTAL GEOGRAPHY

UNIT-1: (Theory)

1. The concepts and approaches of Environmental Geography, human- environment relationship, environmental problems and management are some of the vital topics of this unit to understand the importance of a healthy environment.

UNIT-2: (Practical)

1. It includes the use of soil test- kit (PH, organic carbon), mapping of wetlands and forests from topographical sheet.

SKILL ENHANCEMENT COURSE

SEC-2: REGIONAL PLANNING AND DEVELOPMENT

UNIT-1: REGIONAL PLANNING (Practical)

1. Emphasis has been given particularly on Human Development Index, agricultural and industrial development in India since 1970's and 1990's respectively.

SEMESTER-V

DSE-1A: GEOGRAPHY OF INDIA

UNIT-1: (Theory)

1. This unit includes the physical setting of India and also the population size and growth since independence.
2. It also highlights the potential of Indian economy through its agricultural, mineral and energy resources.

UNIT-2: (Field work)

1. Students prepare a field report based on primary data collected from field survey and secondary data collected from different sources.

SKILL ENHANCEMENT COURSE

SEC-3: COLLECTION, MAPPING AND INTERPRETATION OF CLIMATIC DATA

UNIT-1: COLLECTION, MAPPING AND INTERPRETATION OF CLIMATIC DATA (Practical)

1. This unit specially deals with the climatic data collection, appropriate representation of data with the help of diagrams and interpretations.

GENERIC ELECTIVE

GE-1: PHYSICAL GEOGRAPHY

UNIT-1: PHYSICAL GEOGRAPHY (Theory)

1. It includes the heat balance, global wind circulation pattern and the climatic classification of Koppen.
2. Internal structure of the earth, Plate Tectonics, Fluvial Cycle of Erosion by Davis and Penck and the global hydrological cycle are some important topics of this unit.

SEMESTER-VI

DSE-1B: DISASTER MANAGEMENT

UNIT-1: (Theory)

1. In this unit special emphasis has been given to understand the Causes, Consequences and Management of pre and post disaster.
2. Preparedness, Resilience and Capacity building is very essential to overcome the trauma faced by the people during any kind of hazard or a disaster.

UNIT-2: (Practical)

1. An individual project report based on selected disasters is prepared.

SKILL ENHANCEMENT COURSE

SEC-4: ROCKS AND MINERALS AND THEIR MEGASCOPIC IDENTIFICATION

UNIT-1: (Practical)

1. Students learn the methods and techniques to identify different rocks and minerals.

GENERIC ELECTIVE

GE-2: HUMAN GEOGRAPHY

UNIT-1: HUMAN GEOGRAPHY (Theory)

1. The definition, major sub field and contemporary relevance has been discussed in this unit.
2. The concept of Space and society, race and religion are important components of Human Geography.
3. The world population distribution and settlement patterns and types helps to understand the trends of the changing scenario.

PROGRAMME OUTCOME (PO)

1. Geotectonic and Geomorphology aims to draw out quantitative laws that govern the earth.
2. The primary goal of Climatology is to understand the unique characteristics of atmosphere in controlling the global climate, origin, types of climate, causes and processes influencing the climatic variations.
3. To develop a sense of responsibility in conservation of the environment.
4. Human Geography examines human society and how they develop their culture and economy.

5. Regional Planning aims to speed up the process of social progress of the community of any area. This develops techniques and planning skills.
6. Helps to understand the importance of renewable and non- renewable resources and come up with innovative ideas of sustainable development.
7. Spreading awareness of the causes and consequences of a disaster and developing various management techniques at local and national level.
8. The use analytical techniques and Remote Sensing has a wide range of applications for environmental planning and management.