

Department of Geography

Programme: BA

Course: Geography

Programme Outcome:

On completion of the B.A. (Geography), students are able to :

- 1) Serve as a Geographer.
- 2) Work as a teacher in school and high schools.
- 3) Work in disaster and water resources management.
- 4) Serve in Cartographer in map making division of Government.
- 5) Work in NGO's.
- 6) Can prepare for competitive exams.
- 7) Serve in forest department.

Programme specific Outcomes :-

Upon completion of the Bachelor's of Arts with Geography, students will be able to demonstrate the following :-

- 1) Understood the location of India, relief, structure and drainage systems.
- 2) Identify and characterize Climate, Soils, Natural Vegetation and Natural disaster in India.
- 3) Understand the size of population of India, Distribution and Composition.
- 4) Highlights the production and Distribution of Crops with special reference to Haryana.
- 5) Information about Energy resources like coal, petroleum and minerals resources like Iron ore , aluminium and mica.
- 6) Characterize the Iron and steel Industry, cotton textile industry and Importance of Transport and Communications and Modes of Transport.
- 7) Understand the unifying themes of human geography as well as have a working knowledge of the discipline's diverse conceptual and methodological approaches.
- 8) Demonstrate an ability to develop research questions, critical understand quantitative and qualitative data sources, data analysis and quantitative data sources, data analysis and presentation and conduct research using primary and secondary source material.
- 9) Identify, characterize and explain spatial patterns and structure the interrelationship between people, place and nature.
- 10) Recognize application of geography in everyday life.
- 11) Demonstrate an ability to present geographic concepts, approaches, methodologies, cartographic and other forms.
- 12) Students will be able to know about human races, worldwide, human economic activities for their survival and economic development.

Course Outcome:

The completion of this course will help students to understand the location, Relief and Drainage System of India. In Indian geography we deal with importance of locational settings of area, latitudinal and longitudinal extent of India.

Importance of India's Location

In Indian relief structure we shall know about Himalaya, the Great Plain of India, Coastal plains and Islands. The Drainage system of India tells us about all rivers in India like Ganga system, Bharamputra system and Southern river system. In Indian climate we shall know about Monsoon, factors related to air pressure and wind, Jet stream, ITCZ , AL Nino, La Nino. Distribution of factors in India, Advantages of forests and problems of the forests. Natural hazards like Earthquake, Flood, Tsunami and Drought.

Population :- Distribution , Density, Growth and Composition:-

In this section we shall study about Size of Population of India, Distribution of population and Density of Population. Factor affecting the Distribution and Density of Population, Population Growth Since 1901. Religious Composition, Literacy. Production and Distribution of Rice and Wheat with special reference of Haryana and green Revolution. Production and Distribution of Cotton and Sugarcane with special reference of Haryana.

Energy Resources : Coal, Petroleum, Solar and Nuclear energy:-

Conventional sources of energy like coal petroleum. A brief description of their production, distribution and consumption. Types of Minerals. Production and distribution of Iron Ore, Manganese and Mica. Reserve and conservation of these minerals.

Industries: - Iron and Steel, Cotton Textile, Sugar Transport and Communication:-

Types of Industries. Factors influencing the location of industries. Growth of Iron and Steel Industry in India. Industrial regions of India with special reference to Haryana. Importance of Roads, Classification of Roads, National Highways. Rail Transport, Distribution of Indian Railways, Railway Zones.

Physical Geography (Geomorphology)

To know the fundamentals of Physical Geography. Nature and scope of Physical Geography. To understand formation of rocks, their types and uses. Interior of the Earth. Geological time scale.

Earth movements. Earth quakes and volcanoes. Theory of Isostasy. Wegner's theory of Continental drift theory. Plate Tectonic Theory.

Acquire knowledge of external forces. Types of weathering. Mass movements and its impacts. Causes and types of mass movements.

Cycle of Erosion. Theories work of Davis and Penck regarding erosion Theories work of work of wind and river. Process and landforms of underground water and Glaciers.

Climate + Oceanography

Atmosphere : Composition and Structure, Isolation and Temperature, Global Air Circulation:-

On successful completion of the course students will be able to explain the composition and structure of Earth's Atmosphere and how atmosphere is most important component's of our Earth. Students get knowledge about insolation and Heat Budget. They get to know Earth receives all its energy from the sun in short waves. Students will be able to understand that the horizontal and vertical distribution of temperature. Place near the equator are much hotter than those located near the poles. They identify the factor's that control temperature distribution on the surface of earth like latitude, altitude, distance from sea, ocean currents, prevailing wind, etc. The course has been provide information about three different types of winds on the surface of earth like planetary winds, seasonal winds and local winds.

Theories of monsoon, front's and cyclone :

The successful completion of the course has been provide information about the concept of Atmospheric Pressure belts, monsoon, jet streams, El Nino – La Nina , Airmass, its types and characteristics, front and its type & Cyclone and Anticyclone.

Ocean Relief features & hydrological cycle :

Upon successful completion of the course student's should be able to explain morphology & relief features of oceans and hydrological cycle._The study of ocean morphology and has helped to understand the importance of different ocean features provide with different types of resources required either for Bio-Geo-Chemical cycle functioning or directly as resources in the form of marine organisms minerals and fossil fuels._After studying the Hydrological cycle students should be able to describe the different ways in which water is used and quantities used for various purpose._Distinguish consumptive and non-consumptive uses of water._Describe and quantity the processes that transfer water between parts of the hydrological cycle, calculate residence times for water in different parts of the hydrosphere and identify those parts of the cycle that are most suitable for water resource.

Ocean water Temperature, Salinity And Circulation:

Completion of this course will help them to understand, How temperature balance of the Earth is largely maintained by the oceanic surface as it absorbs huge amount of the global heat._Students should be able to understand about the salinity of oceans water governed by different factors and difference in salinity provides different of bio-reserves in ocean water besides deriving salts from sea water._The course also provides knowledge about origin, significance and types of tides and currents. They are able to recognise the main factors that are responsible for formation of oceanic currents effect's of current's on the atmosphere and human activities._From the present study it is very clear that tides and currents play an important role in influencing the weather and climate of the region. Ocean currents helps in the shipping and navigation activities in the areas that are favourable.

Human Geography

In this Unit students will know about branches of human geography and the approaches to the study of human geography. Students will deal with the concept of the spatial distribution of race and tribes of India. How these tribes are living in a particular area and how they deal with their environment. What kind of schemes of government are there for the welfare and development of these tribes. Students comes to know how the historical approach is important to know the spatial difference of the different tribes in India.

Students comes to know how human adapt its environment in various regions. Cold, Hot, Platea or Mountains. How the needs of different tribes of different areas are differ from each other. They adapt their own kind of environment to survive. Students will deal with the concept of resources, their types and their use. How the sustainable use of resources is beneficial for the future generation and how we can improve the use of these kind of resources. What kind of approach we have to adopt to save or conserve the biotic resources.

Students come to know about the factors that effect the distribution and density of population in the world. What causes behind the fertility and mortality patterns of population. Why people migrate from one place to another in search of food and for the region of safety. Students deal with the theories of population by Malthus and Ricards or Marx. What is the concept of optimum, under or over population. How the growth of population is necessary for the development of a country, because human itself a resource.

This unit provides the information about the settlement of urban and rural areas. Origin and classification of towns. How population pressure is a biggest cause of environment degradation and pollution, soil erosion and deforestation. Concept of sustainable development and future resources.

Economic Geography

Nature and scope of economic geography and relationship of economic geography with other branches of social science of social and classification of economic activities and their impact on environment. Economic geography and how it is interlinked with other subjects of social science.

Also students will able to understand that how basic need of human can fulfil by various activities. Students will develop the knowledge about diversity in economic activities in various regions. Students come to know about how economic activities affects the development of nation and recent change in economic activities.

World natural resources :- types, bases and classification, conservation and utilization of natural resources. Students will able to learn about world natural resources, types and classification. To understand usability and importance of natural resources. They will be able to know by which method we can conserve the natural resources and why we need to conserve these natural resources.

Distribution of food, commercial and plantation crops and classification of mineral resources, distribution and production of various resources. To analyze how the distribution of agriculture resources across the world can affect the world distribution of commercial and plantation crops.

Students derived the knowledge about global distribution of major crops through spatial data with particular maps and what are the main factors that affects the distribution of agriculture system. Students study about the concentration of minerals resources at specific localities in the earth's crust and assess quantities, qualities and areas of undiscovered minerals resources or potential future supply. Students come to know about the economic significance of minerals resources that dictate the industrial and economic development of a country become they provide raw material to primary/secondary/tertiary sectors of the economy.

Major manufacturing industries, transportation and communication and recent trends in international trade. By studying manufacturing industries students will able to know the classification of manufacturing industries and major factors affecting the location of industries. Students will able to know about how economic strength of a country is measured or judge from the development of manufacturing industries and help in eradicating unemployment and poverty in country. Students study about major manufacturing industries like iron ore, coal, cotton etc. and their distribution all around the world and their factors affecting the location of these manufacturing industries. Students come to know about the major transport system and their distribution globally. By studying transport system students get to know how it helps to send raw material, fuel, machineries to different industries at right time and help the economy. In internal trade students gets the knowledge about history of international trade, bases and advantages/ disadvantages of international trade. They come to know about the major trends of economic trade and types of international trade.

GIS/Remote Being

Students come to know about aerial photography, their types, advantages and disadvantages also the history of aerial photography. They came to know in which particular areas aerial photography used is and how it helps is land use planning, movie production, environment studies, power line inspection, servillience, commercial advertising conveyancing and artistic objects. Students acquire knowledge about bases of aerial photo interpretation and what are the methods of aerial photographs. Students gets knowledge about important geometric of an aerial photographs and angle & scale of aerial photographs.

Students acquire knowledge about fundamentals of remote sensing / types of remote sensing and how electromagnetic spectrum helps in remote sensing. They get knowledge about how remote sensing relies on detecting differences in the reflected or emitted radiation from different areas on the land surface over a range or wavelength. They learnt about the various platforms of which aircraft or space craft and the data are recorded either photography or in digital form. They study about the stages of remote sensing and principles of remote sensing and various sensors used in remote sensing. With the study of application of satellite images they came to know about the scope of satellite image which includes spectral, spatial and temporal resolution and came to know how it focuses on documentation

of build up areas or how it is used for differentiating between residential, commercial and Industrial zone.

In GIS they come to know about how GIS helps in design, store, manipulate, manage and present spatial and geographical data. In previous chapter they learn about remote sensing and now the students will.

Geographical Information System:

The students will able to understand about the relation of GIS & Geography. They acquire knowledge about various types of software and hardware requirement in GIS. They learn about the use of software by visual method. Students will get knowledge about the application in various field – Agriculture soils, GIS Application in land use and land cover forest mapping, Hydrology and Map Making.

Statistical methods:

The students learn about how Geographers use Statistics. Describe and summarize data. Make generalizations concerning complex spatial patterns. Estimate likelihoods of outcomes for events at particular location(s). Use sample data to make inferences about a larger set of data (a population). Learn whether actual pattern matches an expected or theoretical. Wish to compare or associate (correlate) patterns. Students learn about Geographic data. What sources of data are available? Which methods of data collections should be used? What type of data will be collected and then analyzed statistically?