

COURSE OUTCOME OF GEOGRAPHY GENERAL (1+1+1 SYSTEM - OLD SYLLABUS)

COURSE NAME	COURSE OUTCOME
<p>PART-I Paper-1 : Physical Geography (Theoretical - 100 Marks)</p> <p>GROUP A: GEOMORPHOLOGY (40 MARKS)</p> <ol style="list-style-type: none"> 1. Structure of the earth. 2. Influence of rocks on topography: Limestone and Granite. 3. Broad outline of plate tectonics and major crustal formations – fold mountains, trenches and island arcs. 4. Evolution of landforms under fluvial process, Normal Cycle of Erosion. 5. Processes of formation of erosional and depositional landforms: coastal and aeolian. <p>GROUP B: CLIMATOLOGY (30 MARKS)</p> <ol style="list-style-type: none"> 1. Insolation and Heat Budget. 2. Horizontal and Vertical distribution of temperature and pressure. 3. Greenhouse effect. 4. Atmospheric disturbances: Tropical and Mid-latitude cyclones. 5. Characteristics of Monsoonal rainfall. 6. Climatic classification after Köppen. <p>GROUP C: BIOGEOGRAPHY (30 MARKS)</p> <ol style="list-style-type: none"> 1. Factors of soil formation. 2. Development of an ideal soil profile and eluviation and illuviation. 3. Properties of soil: Physical (texture, structure) and Chemical (pH, organic matter). 4. Concept of zonal, azonal and intrazonal soils. 5. Concept of Ecosystem and Biomes – i) Tropical Rainforest, ii) Hot Desert. 6. Plant types and distribution (Halophyte, Xerophytes, Hydrophite, Mesophyte). 	<ul style="list-style-type: none"> ● Physical geography is a crucial discipline that helps us to understand the Earth's systems, manage the environment, address climate change, manage natural resources, and plan sustainable cities that harmonise with the natural environment . ● Physical Geography explores the physical characteristics of the Earth such as landforms, climate patterns, soil, vegetation, and ecosystems. ● Physical geography helps us to understand the interconnectedness of the Earth's systems, including the atmosphere, hydrosphere, lithosphere, and biosphere. ● By studying the interactions between these systems, students can better comprehend the processes that shape our planet, such as weather patterns, erosion, and the distribution of resources. ● Climatology is instrumental in studying and understanding climate change. Through the analysis of historical climate data and the atmospheric processes, students will understand global warming and its impacts on ecosystems, weather patterns, and human societies. ● They can easily relate the causes and consequences of worldwide global climatic change. ● Students will learn the important role of Biogeography in managing the world's biodiversity. ● From these students come to know about the study of the geographical distribution of organisms, and the information about how and when species may have evolved.

PART-II

Paper-2 : Human & Regional Geography of India (Theoretical - 100 Marks)

GROUP-A: POPULATION AND SOCIAL GEOGRAPHY (30 Marks)

1. Factors of growth and distribution of world population.
2. Fertility, mortality and age-sex structure of population with reference to India.
3. Migration: Types, causes and consequences.
4. Contemporary Social issues: Literacy and poverty.

GROUP-B: ECONOMIC GEOGRAPHY (30 Marks)

1. Sectors of the economy: primary, secondary, tertiary and quaternary: Changing emphasis through time.
2. Types of agriculture:
 - a) Shifting cultivation of India.
 - b) Intensive subsistence rice farming in India.
 - c) Plantation farming in India: Tea and Coffee
3. Scales of production: cottage, small scale and large-scale industries – general characteristics and examples.
4. Location, problems and prospects of Indian industries.
 - a) Cotton textile industry.
 - b) Heavy engineering industry: locomotive.
 - c) Petroleum refining industry

GROUP-C: REGIONAL GEOGRAPHY AND ENVIRONMENTAL ISSUES OF INDIA (40 Marks)

1. Regions of India:
 - a) Concept of regions: formal and functional
 - b) Broad physiographic regions of India: special reference to Deccan Trappe
 - c) Agricultural Regions of India: special reference to Punjab-Haryana wheat belt,
 - d) Industrial Regions of India: special reference to Asansol-Durgapur industrial belt.
2. Indian monsoon and its impact: problem of flood, drought and cyclone.
3. Forest resources of India: issues concerning deforestation and social forestry.

- Human Geography provides knowledge about the human aspects of geography.
- Students can easily understand the relationship between human beings and the natural world.
- Students can learn about the physical environment, locational pattern, population size, shape and characteristics, agricultural distribution with different methods applied in different regions, industrial location and their distribution, transportation systems with their regional distribution etc. about the country of India.
- Economic Geography studies the nature and use of areas of the Earth's surface, relating and interpreting interactions of physical and cultural phenomena.
- Agriculture geography investigates areas transformed by humans through the activities that belong to the primary sector. It is concerned with different structures of agricultural landscapes and tries to research what exactly led to the development of these places.
- Population geography addresses demographic issues and population processes in an explicitly spatial manner, with a focus on the connection between people and places.
- Population studies help us to know how far the growth rate of the economy is keeping pace with the growth rate of the population.
- This course helps to understand the various facets pertaining to the spatial variation in the distribution of the human population across the Earth with reference to the physical, cultural and socio-economic environment.
- In a nutshell, social geography focuses on the scientific study of the relationship of society and space (spatial components).
- Students are informed about the varieties of areas, such as politics, citizenship, cultural awareness & some general knowledge of world affairs.

4. Causes and consequences of soil erosion in India.

PART-III

**Paper-3 : Applied Geographical Techniques
(Practical - 100 Marks)**

GROUP-A:CARTOGRAPHY

1. Scales: Concept of scales, drawing of linear scales. (10 Marks)
2. Projections: Concept and major classification. Construction may be done graphically or mathematically (15 Marks)
 - a) Simple conic with one standard parallel
 - b) Cylindrical Equal Area
 - c) Polar Zenithal Gnomonic.
3. Cartograms: Choropleth, pie-graphs and square diagrams with proportional scales. (15 Marks)

GROUP-B:MAP INTERPRETATION (20 Marks)

1. Basis of numbering and scale of Survey of India Topographical sheets.
2. Interpretation of 1:50,000 topographical sheets under the following heads:
 - I. Interpretation of relief and drainage from topographical maps with profiles and sketches.
 - II. Interpretation of communication and settlement from topographical maps with sketches.
 - III. Relationship between physical and cultural features with the help of transect charts.

GROUP-C:STATISTICS (20 Marks)

1. Nature and classification of data.
2. Process of tabulation and graphical representation: histogram, frequency polygon, cumulative frequency curve.
3. Measures of central tendency: mean, median and mode.

GROUP-D:FIELD REPORT (Report 10 + 5 viva voce = 15 Marks)

Field Report on either a rural mouza or an urban ward (to be conducted during field excursion)

- Cartographic Techniques and Thematic Mapping aims to provide an in-depth knowledge about the theoretical understanding of the science of map making.
- Various concepts are taught in this paper regarding various kinds of maps, their scales, uses, utilities etc.
- Practical portion mainly deals with the equipment to construct various types of maps, based on various projections.
- Students gain knowledge about different map projections, their utility and the regions which are best suited for a particular projection.
- Field studies allow students to gather their own (primary) data, provide opportunities to extend classroom learning through direct observation and experience, and allow for scientific research through field experiments.
- Statistics play an important role in real life, especially in large industries, where data is computed in bulk.
- It helps to collect, analyse and interpret the data.
- Also, with the help of statistical graphs, charts and tables we can easily present the data.

PAPER-4 : APPLIED GEOGRAPHY

GROUP A : APPLIED GEOGRAPHY (THEORETICAL - 70 Marks)

Section I: Land use and settlement Geography (30 Marks)

1. Concept and attributes of land.
2. Objectives and principles of land use.
3. Factors influencing land use and land categories:
 - a) Agricultural land use.
 - b) Non-agricultural land use.
4. Rural settlements: evolution, nature and effect of physical environment,
5. Urban settlements: definition, morphology and function.

Section II: Remote Sensing and Geographical Information System (40 Marks)

1. Concept of Remote Sensing, different methods of remote sensing – aerial photo and satellite imagery.
2. Aerial Photo: Types and interpretation keys; concept of principal point, fiducial marks, flight line, photo overlap.
3. IRS images: Sensors, different types of resolution and their applicability.
4. Concept of GIS and its applicability: Spatial and attribute data, raster and vector data structure and concept of information layers in GIS.

GROUP B : APPLIED GEOGRAPHY (PRACTICAL - 30 Marks)

1. Interpretation of Daily Weather Maps published by India Meteorological Department – Monsoon season (10 Marks)
2. Preparation of thematic maps: (7 Marks)
 - i) Flow diagram and ii) Determination of Detour Index
3. Aerial photo interpretation for identification of broad physical and cultural features. (7 Marks)
4. Laboratory NoteBook and Viva-voce (3 + 3 = 6 Marks)

- ★ Item 1 to 3 : Internal Assessment : 24 marks.
- ★ Item 4 : Evaluation of practical note book and viva-voce on Practical Notebook by external examiner: 6 marks.

- The importance of a spatial perspective for demographic research has received considerable attention over the past few decades.
- Population geography addresses demographic issues and population processes in an explicitly spatial manner, with a focus on the connection between people and places.
- Population Geography is the study of the demography from a geographical perspective. This course helps to understand the various facets pertaining to the spatial variation in the distribution of the human population across the Earth with reference to the physical, cultural and socio-economic environment.
- More specifically, the goals of modern land use planning include environmental conservation, restraint of urban sprawl, minimization of transport costs, prevention of land use conflicts, and a reduction in exposure to pollutants.
- Land use practices have a major impact on natural resources including water, soil, nutrients, plants and animals.
- Land use information can be used to develop solutions for natural resource management issues such as salinity and water quality.
- Remote sensing technique has emerged as an effective tool for systematic survey, analysis, and better management of natural resources (land, soil, water, forests, mountains) along with the monitoring of desertification, flood, drought, and landform change.
- Remote sensing helps people acquire information about the Earth.
- Satellite remote sensors can serve as major sources of data on the effects of human behaviour within the biosphere, enabling the establishment of the spatial scale and extent of the direct interaction of humans with the global land cover.