# Department of Geography

## Department of Geography

## Course Outcome- B.A

#### Semester-1

## Course Code-101 Physical Geography

On completion of the course, students are able to,

1. Understand scope and branches of physical geography, origin of the earth, interior of the earth.

 Understand the origin of the continent and ocean basins: Wegener's theory the plate tectonics and major landforms.

Understand the composition and structure of atmosphere, insolation, vertical and horizontal distribution
of atmospheric temperature, pressure and pressure belt.

4. Understand ocean bottom topography, ocean deposits, temperature, ocean, tides and coral reefs.

# Course Code-102 Geography of Asia (Excluding India)

On completion of the course, students are able to,

 Acquire the knowledge of Asia in the context of the world (geo political significance and extent), structure and relief, drainage, climate, natural vegetation, soil, natural regions of Asia.

2. Understand population distribution, agriculture region and principal minerals.

Understand industrial regions, transport, major cities, and source of power.
 Understand regions and countries: japan, china, Pakistan, Indonesia, Iran and Israel.

## SEMESTER-II

# Course Code-201: Physical Geography

On completion of the course, students are able to,

Understand the nature and scope of geomorphology, dominant contemporary methodologies, the role
and nature of time in geomorphology.

 Understand model of landscape evolution: Davis, Penck, king and A time-independent modal of heck, deterministic modeling of process-response.

3. Understand Isostasy, seismicity, vulcanicity, tectonic and neo-tectonic landforms.

4. Understand the mass wasting and associated landforms, landforms associated with geomorphic agents.

## Course Code-202 Geography of India

On completion of the course, students are able to,

- Understand India-A subcontinent, physical feature, geologic structure, drainage system, climate, natural vegetation, soil, natural regions.
- Understand agriculture, crops (food, plantation and commercial), agriculture production, and agriculture regions.
- 3. Understand industries (metallurgical, textile, engineering, chemical, food, leather, forest based).
- Understand population (density, distribution and urbanization), transport, multipurpose projects, foreign trade, regional development and planning.

#### SEMESTER-III

# Course Code-301 Climatology and Biogeography

On completion of the course, students are able to,

- Understand nature and scope of climatology, general circulation of the atmosphere, the monsoon local winds.
- Understand classification of climate: koppen classification and Thornthwaite classification, climate type and their distribution, climate change.
- Understand biosphere & bio-geography-concept, scope and components, ecosystem concept, component and functioning.
- Understand distribution of plants in different ecosystem and ecological conditions, distribution of animals in different ecosystem and conditions.

## Course Code-302 Human Geography

On completion of the course, students are able to,

 Understand nature and scope of human geography, branch of human geography, concept of man environment relationship. derstand evolution of man: classification of races, characteristics of races and their broad distribution, numan adaptation to the environment.

. Understand the growth and distribution of population, world pattern: physical, economic and social

factors, major human agglomerations.

 Understand rural settlement: types and pattern, urban settlement: evolution and classification, rural houses in India.

#### SEMESTER-IV

## Course Code-401 Urban Geography

On completion of the course, students are able to,

1. Understand evolution and concept of urban geography, urban and urbanization.

2. Understand town and culture, origins and growth of ancient town, modern town and their problem.

3. Understand urban areas and conurbation, rural-urban fringe, umland.

 Understand functional classification of towns, hierarchy of urban settlement, town planning meaning and principals.

## Course Code-402 (A) Environmental Geography

On completion of the course, students are able to,

- Understand definition, scope and evolution of environmental geography, concept of environmental geography.
- Understand ecosystem: food chains, trophic levels and productivity, energy flow, circulation of element and geo-biochemical cycle.

3. Understand ecosystem services, biomes, bio-diversity, soil system, man and climate.

4. Understand environmental degradation, environmental events hazards, and environmental pollution.

## Course Code-402 (B) World Regional I Geography (Except Asia)

On completion of the course, students are able to,

 Understand meaning and scope of regional geography, regions and regionalism, globalization and WTO, pollution environment and sustainable development.

 Understand Europe: A geographical introduction, physical structure, economic and demographic pattern.

 Understand North America: A geographical introduction, physical structure, economic and demographic pattern. derstand Latin America: A geographical introduction, physical structure, economic and demographic pattern, regional study of Brazil.

#### SEMESTER-V

# Course Code-501 Evolution of Geographical thoughts

On completion of the course, students are able to,

1. Understand definition and purpose of geography, science and philosophy of geography, the basic concept of geography.

 Understand geography in classical times: Greek and Roman geographers contribute by Arab geographers, renaissance, eighteenth century geography.

3. Understand formulation of scientific geography, school of thought: German, French environmental determinism, possiblism.

4. Understand dualism in geography, dichotomism of scientific and regional geography; unity in geography, recent trends in geography.

## Course Code-502 (A)Oceanography

On completion of the course, students are able to,

1. Understand definition, scope and development of oceanography.

- Understand relief of the ocean floor, continental drift and ocean floor spreading, composition of sea water.
- 3. Understand temperature in oceans, salinity, and density and water masses in oceans.

4. Understand coral landforms, waves and tides, ocean current.

## Course Code-502 (B) Agriculture Geography

On completion of the course, students are able to,

 Understand nature, scope, significance and development of agriculture geography approaches to the study of agriculture geography.

2. Understand determinants of agricultural land use: physical, economic, social, and technological, land

holding and land tenure system.

3. Understand theories of agriculture geography, von thunen's theory (model) of agriculture location and its recent modification.

derstand regional pattern of productivity in India, green revoluntion, white revolution, food deficit and food surplus regions, world pattern of agriculture.

## Course Code-502 (C) Population Geography

On completion of the course, students are able to,

- Understand nature, scope, and development of population geography; source and type of population data: census, sample survey and vital registration system.
- Understand world population; growth causes and consequences; factor affecting population distribution; demographic transition theory.
- Understand population characteristics; fertility and mortality; age and sex structure; occupational structure; human resource development.
- 4. Understand population resources region of India; populationgrowth and distribution in India.

#### SEMESTER-VI

#### Course Code-601 Economic Geography

On completion of the course, students are able to,

- 1. Understand meaning, aim and scope of economic geography.
- Understand primary production, vegetation & forest economy, soil resources, mineral resources (iron ore and bauxite).
- 3. Understand agriculture regions (D. Whittlesey), principle crops: wheat. Paddy, sugarcane, tea, theory of agriculture location.
- Understand world transportation,; major trans-continental railways, sea and routes, international trade, patterns and trends.

### Course Code-602(A) Regional Planning and development

On completion of the course, students are able to,

- Understand Regional concept in geography: concept, scope& purpose of regional planning, types of regions: formal and functional: uniform and nodal.
- Understand regional planning: planning process-sectoral, temporal and spatial dimensions; short term and long term perspective planning.
- Understand regional development strategies: concentration vs. dispersal, case studies for plans of developed and developing countries.
- Understand concept of multi- level planning: decentralizes planning; peoples participation in the planning process, concept and approaches of urban development, landscape ecology and sustainable ecological development.

#### ode-602(B) Political Geography

n completion of the course, students are able to,

 Understand definition, nature and scope; geography, politic, geopolitics & political geography; history and development of political geography.

2. Understand concept of nation, state and nation-state; geographic characteristics of states: size, shape, location,

cores and capital.

3. Understand global geo-strategic views: A.T. mahan, Mackinder, spykman & sever sky with other views.

4. Understand political geography of India; resource development and power politics; India's neighbors & geopolitical study of Indian Ocean; political geography of SAARC.

#### Course Code-602(C) Geography of Tourism

On completion of the course, students are able to,

 Understand concept of leisure and tourism, type of tourism; definition, scope and significance of geography of tourism; geographical basis of tourism; resource and infrastructure for tourism.

2. Understand impact of tourism: physical, economical, and social, culture impacts; concept of ecotourism;

new emerging trends in tourism.

3. Understand tourism marketing: marketing concepts and marketing in tourism.

 Understand globalization and tourism; tourist in India; resource and growth; national tourism policy in India; tourism organization.

Note: - students also gain knowledge through field work/ practical in every class of UG and PG. Cartography classes gives practical knowledge related syllabus. Department also organized every year education tour visit according to their syllabus for the practical knowledge.

#### Course Outcome-PG. M.A.

#### Semester-1

#### Course Code-101Advance Physical Geography

On completion of the course, Student are able to,

- 1. Understand the nature and scope of physical geography, geological time scale, interior constitution of the earth, isostatic balance and plate tectonic plates.
- Understand lithosphere epirogenetic forces as well as deep knowledge of theories related origin of continents and ocean basins.

- movement, erosion and erosional process.
- Understand the composition and structure of atmosphere, insolation, and distribution of temperature, atmospheric pressure and winds, precipitation.
- 5. Understand the relief of the ocean floor, composition of sea water, distribution of temperature and salinity oceanic currents, marine deposits, coral landforms, tide, etc.

## Course Code-102 Natural Resource Management

On completion of the course, students are able to,

- 1. Understand the basic framework related natural resources.
- Understand the application of remote sensing and geographic information system (GIS) in natural resources studies.
- 3. Understand the carrying capacity of natural resources with special reference to Himalaya.
- 4. Understand the ecology and ecosystem.
- 5. Understand the natural resources management and sustainable development in Himalaya.

## Course Code-103 Advance Geography of India

On completion of the course, students are able to,

- 1. Understand the physical aspect of India.
- 2. Understand the population and other human aspects.
- 3. Understand the agriculture scenario and recent agriculture development in India.
- 4. Understand the industrial resource base and transport network development.
- 5. Understand the regional divisions of India.

## Course Code-105Geography of Tourism

On completion of the course, students are able to,

- 1. Understand the nature, basic characteristics, significance and development of Geography of tourism.
- 2. Understand the basic components and present scenario of tourism in India.

- 3. Understand the measurements and dimensions of tourism.
- 4. Understand the resort towns and morphology with special reference of Uttarakhand Himalaya.
- 5. Understand the tourist industry and environment relationship.

#### Semester II

# Course code-201 Advance Geomorphology

On completion of the course, students are able to,

- 1. Understand the nature, scope, trends and development of geomorphology.
- 2. Understand the tectonic processes and large & small scale landforms.
- 3. Understand the radiocarbon, tree ring dating and polycyclic landforms.
- 4. Understand the theories and techniques related geomorphology.
- 5. Understand the applied geomorphology and deep insight the related subject topics.

# Course code -202 urban environment and planning

On completion of the course, students are able to,

- Student is expected to understand the theoretical base of urban geography and planning.
- Understand the urban morphology and functions with special reference to India and Uttarakhand.
- 3. Understand the central place system and regional development in India.
- 4. Understand the urban environmental problems in developing countries.
- 5. Understand the urban development planning and management.

# Course code -203 Evolution and development of geographical thoughts

On completion of the course, students are able to,

1. Understand the basic concept, related geographical thoughts

- 2. Understand the major contribution of different geographical school of thoughts.
- 3. Understand the paradigms and changing paradigms in geography.
- 4. Understand the nature of dichotomies in geography.
- 5. Understand the modern techniques related remote sensing and GIS in geography.

## Course code -204 Remote Sensing Applications

On completion of the course, students are able to,

- 1. Understand the basic function of remote sensing.
- 2. Understand the aerial photographs and photogrammetry.
- 3. Understand the digital image processing.
- 4. Understand the thermal and microwave remote sensing.
- 5. Understand the function of remote sensing applications in different terrain.

#### Semester III

## Course code - 301 Environment Management and Sustainable Development

On completion of the course, students are able to,

- 1. Understand the meaning scope and significance of environment geography.
- 2. Understand the environment problems at global, regional and local levels.
- 3. Understand the environmental impact assessment with special reference to India.
- 4. Understand the concept and need of sustainable development
- 5. Understand the concept and approaches of environmental management.
- 6. Understand the environmental management in Uttarakhand Himalaya.

## Course code-302 Agriculture Geography and Agro-Ecosystem

On completion of the course, students are able to,

- 1. Understand the nature, scope and significance of agriculture geography.
- 2. Understand the different agriculture types and their world distribution.
- 3. Understand the technique of agriculture regionalization.

- 4. Understand the agriculture ecology and ecosystem.
- 5. Understand the management and planning in regional perspective.

### Course code -303 Rural Development Planning

On completion of the course, students are able to,

- 1. Understand the meaning concept, scope of rural development and planning.
- 2. Understand the dimensions of rural economy.
- 3. Understand the paradigm of rural development.
- 4. Understand the rural development programs in India.
- 5. Understand the planning for, rural development.

## Coursecode-304 Climate change, impact and adaptations in Himalaya

On completion of the course, students are able to,

- 1. Understand the concept of climate change.
- 2. Understand the trends of climate change in Himalaya.
- 3. Understand the climate change induced natural disasters.
- 4. Understand the climate change vulnerability and risk.
- 5. Understand the climate change adaptation in Himalaya.

#### Semester IV

## Course code- 401 Advance Geography of Uttarakhand

On completion of the course, students are able to,

- 1. Understand the physical background of Uttarakhand.
- 2. Understand the population and settlement types & patterns of Uttarakhand.
- 3. Understand the present agricultural development.
- 4. Understand the mineral, energy resources and industry.
- 5. Understand the future prospects and development plans in UttarakhandHimalaya.

## Course code- 402 Population Geography and Human Resources Development

On completion of the course, students are able to,

1. Understand the fundamental of population geography.

- 2. Understand the sources of population data.
- 3. Understand the different demographic traits.
- 4. Understand the courses and consequences of human migration.
- 5. Understand the population projection and human resource development planning.

### Course code- 403Biogeography

On completion of the course, students are able to,

- 1. Understand the fundamental concepts related biogeography.
- 2. Understand the plant geography and plant succession.
- 3. Understand the zoogeography and biodiversity.
- Understand the impact of climate change on flora and fauna with special reference to Uttarakhand Himalaya.
- 5. Understand the biotic resource management.

## Course code- 406Disaster management

On completion of the course, students are able to,

- 1. Understand the fundamental of disaster management.
- 2. Understand the long term measures and utilization of resources.
- 3. Understand the response to disaster impact.
- 4. Understand the major impact factor.
- 5. Understand the regional pattern of disaster management.

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