GEOGRAPHY

SYLLABUS FOR HIGHER SECONDARY COURSE

Rationale :

Geography is introduced as an elective subject at the higher secondary stage. After ten years of general education, students branch out at the beginning of this stage and are exposed to the rigours of the discipline for the first time. Being an entry point for the higher education, students choose geography for pursuing their academic interest and, therefore, need a broader and deeper understanding of the subject. For others, geographical knowledge is useful in daily lives because it is a valuable medium for the education of young people. Its contributions lie in the content, cognitive processes, skills and values that geography promotes and thus helps the students explore, understand and evaluate the environmental and social dimensions of the world in a better manner.

Since geography explores the relationship between people and their environment, it includes studies of physical and human environments and their interactions at different scales– local, state/region, nation and the world. The fundamental principles responsible for the varieties in the distributional pattern of physical and human features and phenomena over the earth's surface need to be understood properly. Application of these principles would be taken up through selected case studies from the world and India. Thus, the physical and human environment of India and study of some issues from a geographical point of view will be covered in greater detail. Students will be exposed to different methods used in geographical investigations.

Common Core Components (NPE 1986) such as India's common cultural heritage, equality of sexes, protection of environment, observance of the small family norm and inculcation of scientific temper will be reflected in the geography syllabus.

The geography course will incorporate some issues of NCF–2005 such as making children sensitive to environment and its protection to nature and preserve the environment, and using geographical knowledge in understanding various environmental and socio-economic issues of the community, region and the country, e.g. gender and marginalised groups.

Objectives :

The course in geography will help learners :

- Familiarise themselves with the terms, key concepts and basic principles of geography;
- Search for, recognise and understand the processes and patterns of the spatial arrangement of the natural as well as human features and phenomena on the earth's surface;
- Understand and analyse the inter-relationship between physical and human environments and their impact;
- Apply geographical knowledge and methods of inquiry to new situations or problems at different levels– local/regional, national and global;
- Develop geographical skills, relating to collection, processing and analysis of data/information and preparation of report including maps and graphics and use of computers wherever possible; and
- Utilize geographical knowledge in understanding issues concerning the community such as environmental issues, socio-economic concerns, gender and become responsible and effective member of the community.

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SYLLABUS FOR HIGHER SECONDARY FIRST YEAR COURSE

One Paper **Time : Three Hours** **Marks : 70**

Unit No.	Title	Marks	Periods
A. FUNDAMENTALS OF PHYSICAL GEOGRAPHY			
Unit-I	Geography as a Discipline	03	06
Unit-II	The Earth	05	12
Unit-III	Landforms	08	20
Unit-IV	Climate	10	30
Unit-V	Water (Ocean)	04	12
Unit-VI	Life on the Earth	03	08
Unit-VII	Map Work	02	
B. INDIA– PHYSICAL ENVIRONMENT			
Unit-I	Introduction	03	06
Unit-II	Physiography	10	24
Unit-III	Climate, Vegetation and Soil	10	26
Unit-IV	Natural Hazards and Disasters	09	22
Unit-V	Map Work	03	
	Total Marks	**70**	Total Periods **166**

Evaluation :

Evaluation on geography should be based on the objectives of geography which are to be realised at this stage. There is a need to introduce continuous and comprehensive evaluation in a systematic manner. Emphasis is to be given on evaluating learners' progress in acquiring various geographical skills along with the cognitive areas.

Unitwise Distribution of Course contents :

A. FUNDAMENTALS OF PHYSICAL GEOGRAPHY (Periods 88)

Unit I : Geography as a Discipline **(Periods 6)**

- Geography as an integrating discipline, as a science of spatial attributes;
- Branches of geography; importance of physical geography

Unit II : The Earth **(Periods 12)**

- Origin and evaluation of the earth; interiod of the earth. Wegener's continental drift theory and plate tectonics; Earthquakes and volcanoes.

Unit III : Landforms **(Periods 20)**

- Rocks and minerals– major types of rocks and their characteristics;
- Landforms and their evolution
- Geomorphic processes– weathering, mass wasting, erosion and deposition; soils– formation

Unit IV : Climate **(Periods 30)**

- Atmosphere– compositions and structure; elements of weather and climate;
- Insolation– angle of incidence and distribution; heat budget of the earth– heating and cooling of atmosphere (conduction, convection, terrestrial radiation, advection); temperature– factors controlling temperature; distribution of temperature– horizontal and vertical; inversion of temperature;
- Pressure– pressure belts; winds– planetary seasonal and local, air masses and fronts; tropical and extra tropical cyclones;
- Precipitation– evaporation; condensation– dew, frost, fog, mist and cloud; rainfall– types and world distribution;
- World climates– classification (Koeppen), greenhouse effect, global warming and climatic changes.

Unit V : Water (Oceans) **(Periods 12)**

- Hydrological cycle;
- Oceans– submarine relief; distribution of temperature and salinity; movements of ocean water– waves, tides and currents.

Unit VI : Life on the Earth **(Periods 8)**

- Biosphere– importance of plants and other organisms; biodiversity and conservation; ecosystems, bio-geo chemical cycle, and ecological balance.

B. INDIA– PHYSICAL ENVIRONMENT **(Periods 78)**

Unit I : Introduction **(Periods 6)**

- Location– space relations and India's place in the world.

Unit II : Physiography **(Periods 24)**

- Structure and relief;
- Drainage systems : concept of water sheds : the Himalayan and Peninsular;
- Physiographic divisions.

Unit III : Climate, Vegetation and Soil **(periods 26)**

- Weather and climate– spatial and temporal distribution of temperature, pressure, winds and rainfall; Indian monsoons; mechanism, onset and variability– spatial and temporal; climatic types,
- Natural vegetation– forest types and distribution; wild life; conservation; biosphere reserves;
- Soils– major types (ICAR's classification) and their distribution, soil degradation and conservation.

Unit IV : Natural Hazards and Disasters : Causes, Consequences and Management
(One case study to be introduced for each topic) **(Periods 22)**

- Floods and droughts
- Earthquakes and Tsunami
- Cyclones
- Landslides

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C.	PRACTICAL WORK			Total Marks : 30
Unit-I	Fundamentals of maps	10	22	
Unit-II	Topographic and Weather Maps	20	32	
	Total Marks	30	Total Periods 54	

Marks : 30

C. PRACTICAL WORK **(Periods 54)**

Unit I : Fundamental of maps 10 marks **(Periods 22)**

- Maps - types; scales-types; construction of linear scales, measuring distance, finding direction and use of symbols;
- Latitude, Longitude and time;
- Map projection - typology, construction and properties of conical with one standard parallel and Mercator's projection.

Unit II : Topographic and Weather Maps 20 marks **(Periods 32)**

- Study of topographic maps (1:50,000, Survey of India maps); contour cross section and identification of landforms- slopes hills, valleys, waterfalls, cliffs; distribution of settlements;
- Aerial Photographs and Satellite Images:

  Aerial Photographs : types and geometry - vertical aerial photographs, difference between maps and aerial photographs; photo scale determination;

  Satellite images : Stages in remote sensing data acquisition, platform and sensors and data products, (photographic and digital)

  Interpretation of physical and cultural features from aerial photographs and satellite imageries.
- Use of weather instruments : thermometer, wet and dry-bulb thermometer, barometer, windvane, raingauge.
- Use of weather charts : describing pressure, wind and rainfall distribution.