Class – XI REVISED SYLLABUS (For the Session of 2020-21 Only) Geography (THEORY)

Part A: Fundamentals of Physical Geography

Unit-1: Geography as a Discipline

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

Unit-2: The Earth

Interior of the earth; Wegener's continental drift theory and plate tectonics; earthquakes and volcanoes.

Unit-3: Landforms

Rocks: major types of rocks and their characteristics; Geomorphic processesweathering, mass wasting, erosion and deposition; soil-formation

Unit 4: Climate

- Atmosphere- composition and structure; elements of weather an climate.
- Insolation-angle of incidence and distribution; heat budget of the earth-heating and cooling of atmosphere (conduction, convection, terrestrial radiation and advection); temperaturefactors controlling temperature; distribution of temperature-horizontal and vertical; inversion of temperature.
- Precipitation-evaporation; condensation-dew, frost, fog, mist and cloud; rainfall-types and world distribution.

Unit 5: Water (Oceans)

• Movements of ocean water waves, tides and currents; submarine reliefs.

Unit 6: Life on the Earth

• Biosphere - importance of plants and other organisms; biodiversity and conservation; ecosystem and ecological balance.

Unit 7: Map work on identification of features based on the above units on the outline political map of the world.

Part B. India - Physical Environment

Unit 8: Introduction

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

Unit 9: Physiography

- Drainage systems: concept of watershed; the Himalayan and the Peninsular;
- Physiographic divisions.

Unit 10: Climate, Vegetation and Soil

- Weather and climate spatial and temporal distribution of temperature, pressure winds and rainfall.
- 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 12: Map Work of features based on above units for locating and labelling on the Outline Political map of India.

C. Practical Work

Unit 1: Fundamentals of Maps

- Maps -types; scales-types; construction of simple linear scale, measuring distance; finding direction and use of symbols.
- Latitude, longitude and time.
- Map projection- typology, construction and properties of projections : Conical with one standard parallel and Mercator's projection.

Unit 2: Topographic and Weather Maps (28 Periods)

- Study of topographic maps (1 : 50,000 or 1 : 25,000 Survey of India maps); contour cross section and identification of landforms-slopes, hills, valleys, waterfall, cliffs; distribution of settlements.
- Aerial Photographs: Types & Geometry-vertical aerial photographs; difference between maps & aerial photographs; photo scale determination.
- Satellite imageries, stages in remote sensing data-acquisition, platform & sensors and data products, (photographic & digital).
- Identification of physical & cultural features from aerial photographs & satellite imageries.
- Use of weather instruments: thermometer, wet and dry-bulb thermometer, barometer, wind vane, raingauge.
- Use of weather charts: describing pressure, wind and rainfall distribution.

Unit 3: Practical Record Book and Vivavoce'.