

# NATIONAL PRIMA TALENT OLYMPIAD EXAMINATIONS

## GEOGRAPHY

CLASS VII

### 1. REPRESENTATION OF GEOGRAPHICAL FEATURES

- Use of colours on Topographical sheets [ blue – water body, red- settlements, yellow- agriculture, brown – high relief, green – forests]
- Use of scales for measurement – types of scales [ Representative Fraction, Linear scale]
- Small Scale Map and Large Scale Map
- Measuring distance on the map using scales [ straight line, curved line]
- Conventional symbols [ based on topographical sheets, Survey of India]

### 2. LANDFORMS

- **Types of landforms**
- **Endogenic and Exogenic Forces**
- **Mountains – 1) Fold Mountain – formation, Old and young fold mountain, examples**
  - 2) **Block Mountain – Formation, examples**
  - 3) **Volcanic Mountain – Formation and example**
  - 4) **Importance of mountains**
- **Plateaus – Types of plateaus (Intermontane, Continental plateaus, Lava Plateaus, piedmont plateaus) and their example, Importance of plateaus**
- **Plains – formation, Types of Plains, distribution of plains in the world [ plains of North America, Gangetic plains of India], Importance of plains**
- **Landforms and People – impact of landforms on the life of people [ comparison between life in the mountains and life in the plains]**

### 3. WATER BODIES

- **Oceans, seas, lakes and rivers**
- **Oceans – Pacific, Atlantic, Indian, Arctic and Southern ocean; their characteristics and importance.**
- **Seas – Inland seas and marginal sea with examples**
- **Lakes – Definition, types of Lakes with examples**
- **Rivers – Stages of the journey of river, importance of rivers**
- **Water Pollution and its prevention**

## **4. STUDY OF CONTINENTS: NORTH AMERICA AND SOUTH AMERICA**

### **NORTH AMERICA**

- **Formation of Continents** – Pangea, Panthalassa, Plate tectonic, Laurasia and Gondwanaland, Continental; Drift Theory
- Location, boundaries, political divisions [ countries and their capitals],
- Major physical features
- Locating the major physical features on the map.

### **SOUTH AMERICA**

- Location, boundaries, political divisions [ countries and their capitals], major physical features.
- Locating the major physical features on the map

## **5. THE ATMOSPHERE**

- Composition of the atmosphere
- Usefulness of the atmosphere
- Structure of the atmosphere [ Troposphere, Stratosphere, Ozone layer, Thermosphere, Mesosphere, Exosphere]
- The Ozone Layer – ozone layer depletion
- Greenhouse Effect [ meaning and causes], Greenhouse gases
- Global warming – Impact of Global warming – [ melting of ice, sea level rise, changing patterns of distribution of precipitation and temperature, etc.]
- Ways to reduce global warming.

## **6. WEATHER AND CLIMATE**

- Elements of weather and climate
- Temperature – Insolation and Terrestrial Radiation, Factors that affect temperature,
- Atmospheric Pressure – Definition, Factors affecting atmospheric pressure, World's pressure belts
- Humidity – Definition, Absolute and Relative Humidity
- Precipitation – Definition, Types ( Rain, hail, dew and snow),
- Wind – Definition, Planetary winds, Periodic Winds

- Clouds – Definition and Classification of clouds
- Weather Instruments which are used to measure temperature, atmospheric pressure, wind direction, wind velocity, humidity and precipitation
- Isotherms and Isohyets
- Difference between Weather and Climate

## 7. WEATHERING AND SOIL FORMATION

- Types of rocks [ Igneous, Metamorphic, Sedimentary] formation, examples.
- Weathering – meaning, factors affecting weathering, types of weathering [ mechanical, chemical, biological], soil formation as a result of weathering.
- Soil Profile – importance of soil conservation, methods of soil conservation

## 8. AGRICULTURE IN INDIA

- Types of crops – food crops- (wheat, rice, millets, Maize, Pulses), cash crops (oilseeds cotton, jute, sugarcane), Plantation crops (Tea, coffee, rubber) , Horticulture crops, Kharif crops, Rabi crops
- Problems in the agricultural sector
- Government Initiatives
- Livestock Rearing

## 9. MINERALS

- Minerals and ores – Meaning and examples
- Importance of minerals
- Types of minerals – Ferrous, non-ferrous and precious minerals
- Difference between metallic and non-metallic minerals
- Distribution of minerals – Metallic Minerals ( Iron ore, Bauxite, Manganese, Uranium, Gold, Silver and Copper), Non-metallic minerals ( limestone, mica)
- Mineral Fuels – Coal, Petroleum Natural gas
- Methods of mining
- Hazards of mining
- Conservation of minerals

## 10. INDUSTRIES

- Need for industries in the world
- Types of industries on the basis of size - large scale, small scale, cottage industries
- Types of industries on the basis of ownership – Private sector, Public Sector, Joint Sector and Co-operative Sector Industries
- Types of Industries on the basis of raw materials - agro-based, mineral based industries, Forest-based Industries and Marine Based Industries
- Industrial Regions
- Factors related to establishment of an industry
- Important industries of the world [ Iron and Steel, Cotton Textile, Information Technology, Sugar Industry, Ship building, Fishing, Automobile, important centres of these industries and their location on the world map.
- Pollution due to industries and its prevention.