

# Geography – SSC Notes (Basics)

## 1. Earth – Structure & Shape

- **Shape:** Oblate Spheroid (Equatorial diameter > Polar diameter)
- **Layers of Earth:**
  1. Crust → Thin outer layer
  2. Mantle → Semi-solid, magma layer
  3. Outer Core → Liquid, mainly iron & nickel
  4. Inner Core → Solid, mainly iron & nickel
- **Latitude** → Horizontal lines, measure North-South
- **Longitude** → Vertical lines, measure East-West
- **Tropics:** Tropic of Cancer (23.5°N), Tropic of Capricorn (23.5°S)
- **Prime Meridian** → 0° Longitude, passes through Greenwich, UK

## 2. Earth Movements

1. **Rotation**
  - Earth rotates west to east
  - **Duration:** 24 hours
  - **Causes:** Day & Night, Deflection of winds (Coriolis effect)
2. **Revolution**
  - Earth revolves around Sun
  - **Duration:** 365.25 days
  - **Causes:** Seasons, Length of day variation, Climate zones

## 3. Atmosphere

- **Layers:**
  1. Troposphere → Weather occurs, up to 12 km
  2. Stratosphere → Ozone layer, up to 50 km
  3. Mesosphere → Meteors burn, up to 80 km
  4. Thermosphere → Aurora occurs, up to 400 km
  5. Exosphere → Space starts
- **Important Gases:** N<sub>2</sub> (78%), O<sub>2</sub> (21%), CO<sub>2</sub> & Others (1%)

## 4. Hydrosphere

- **Water Distribution:**
  - Oceans → 97%
  - Freshwater → 3% (Glaciers, Rivers, Lakes, Groundwater)
- **Oceans** → Pacific, Atlantic, Indian, Southern, Arctic
- **Major Rivers (India):** Ganga, Yamuna, Brahmaputra, Godavari, Krishna, Narmada, Kaveri

## 5. Lithosphere – Landforms

- Mountains → Himalayas, Andes, Rockies
- Plateaus → Deccan Plateau, Colorado Plateau
- Plains → Indo-Gangetic Plain, Great Plains (USA)
- Deserts → Thar, Sahara, Gobi

## 6. Climatic Zones

1. Tropical → Near equator, hot & humid
  2. Subtropical → Hot summers, mild winters
  3. Temperate → Moderate temperature
  4. Polar → Very cold, ice caps
- Monsoon → Seasonal wind, crucial for Indian agriculture
  - Rainfall influenced by → Relief, Latitude, Pressure belts, Winds



## Important SSC Points

- Earth → Oblate Spheroid
- Tropic of Cancer → 23.5°N
- Prime Meridian → Greenwich
- Himalayas → Young Fold Mountains
- Ganga → Holy river, longest in India
- Major Oceans → Pacific largest, Arctic smallest