

# River System of India – SSC Notes

## 1. Classification of Rivers

- **By Drainage System:**
  1. Ganga-Brahmaputra Drainage System (Northern Rivers)
  2. Peninsular Rivers (East-flowing & West-flowing)
  3. Inland Drainage / Desert Rivers
- **By Source / Region:**
  - Himalayan Rivers → Perennial, snow-fed
  - Peninsular Rivers → Seasonal, rain-fed

## 2. Himalayan Rivers (Northern Rivers)

- **Characteristics:**
  - Perennial (flow throughout year)
  - Snow-fed & rain-fed
  - Steep gradient in upper course → Hydro-power potential

### ◆ Major Himalayan Rivers

1. **Indus River System**
  - **Origin:** Tibet (Ladakh) → Flows through J&K, Punjab
  - **Tributaries:** Jhelum, Chenab, Ravi, Beas, Sutlej (5 major)
  - **Importance:** Irrigation → Punjab & Sindh
  - **Note:** Part of Indus Water Treaty (India-Pakistan)
2. **Ganga River System**
  - **Origin:** Gangotri Glacier, Uttarakhand
  - **Major Tributaries:** Yamuna, Ghaghara, Gandak, Kosi, Son
  - **Importance:** Fertile plains, agriculture, holy river
  - **Delta:** Sundarbans → Largest delta in world
3. **Brahmaputra River System**
  - **Origin:** Tibet (Tibetan Plateau) → Name Yarlung Tsangpo
  - **Flows:** Arunachal Pradesh → Assam → Bangladesh
  - **Features:** Braided river, fertile Assam valley, prone to floods
  - **Delta:** Joins Ganga → Ganga-Brahmaputra Delta

## 3. Peninsular Rivers

- **Characteristics:**
  - Rain-fed → Seasonal flow
  - Older rivers → Less gradient → Gentle slope
  - Flow into Bay of Bengal (East-flowing) or Arabian Sea (West-flowing)

### ◆ East-flowing Rivers (Bay of Bengal)

1. Godavari → Maharashtra → Andhra Pradesh
  2. Krishna → Maharashtra → Karnataka → Andhra Pradesh
  3. Kaveri → Karnataka → Tamil Nadu
  4. Mahanadi → Chhattisgarh → Odisha
- Features: Deltas → Fertile soil, agriculture hub

#### ◆ West-flowing Rivers (Arabian Sea)

1. Narmada → Madhya Pradesh → Gujarat
  2. Tapi (Tapti) → Madhya Pradesh → Gujarat
  3. Mandovi, Zuari → Goa
- Features: Short, fast-flowing, estuaries, narrow valleys

## 4. Inland / Desert Rivers

- Definition: Rivers that do not reach the sea
- Examples: Luni (Rajasthan), Ghaggar, Sabarmati
- Importance: Irrigation in arid regions, seasonal flow

## 5. River Basins of India

- Major River Basins (SSC Important):
  1. Ganga Basin → Uttar Pradesh, Bihar, West Bengal
  2. Brahmaputra Basin → Assam, Arunachal Pradesh
  3. Godavari Basin → Maharashtra, Telangana, Andhra Pradesh
  4. Krishna Basin → Maharashtra, Karnataka, Andhra Pradesh
  5. Narmada Basin → Madhya Pradesh, Gujarat
  6. Mahanadi Basin → Chhattisgarh, Odisha
- Important SSC Fact: 14 major river basins → Cover ~82% of India's area

## 6. Lakes & Wetlands (Related to Rivers)

- Types of Lakes:
  - Tectonic → Wular (J&K)
  - Glacial → Dal Lake, Nainital
  - Lagoon / Estuarine → Chilika, Pulicat
- Wetlands Importance: Biodiversity, fisheries, flood control

## 7. Important SSC Points – River System

- Longest River: Ganga → 2525 km
- Longest West-flowing River: Narmada → 1312 km
- Highest Discharge River: Brahmaputra
- Largest Delta: Sundarbans → Ganga-Brahmaputra Delta
- Major Himalayan Rivers → Perennial, snow-fed
- Major Peninsular Rivers → Seasonal, rain-fed
- Rivers for Hydro-power → Ganga, Brahmaputra, Godavari, Krishna

