



UpSC | Day 14: Geography - Mapping | BNC Academy

1 India: Physical Features & Rivers

📍 Himalayan Ranges & Passes

- **Himalayan Ranges:**

- The Himalayas are a young fold mountain range, formed by the collision of the Indo-Australian and Eurasian tectonic plates. They are divided into several parallel ranges:
 - **Karakoram:** The northernmost range, known for its high peaks, including K2 (the second highest peak in the world).
 - **Ladakh:** Located south of the Karakoram, it's a high-altitude, cold desert region.
 - **Zaskar:** South of Ladakh, it's a rugged mountain range with deep valleys.
 - **Pir Panjal:** Further south, it's a lower Himalayan range known for its scenic beauty.
 - **Dhauladhar:** Also in the Lesser Himalayas, it's known for its striking white peaks.

- **Important Passes:**

- Mountain passes are crucial for transportation and trade through the Himalayas.
 - **Nathu La (Sikkim):** Connects Sikkim with Tibet (China). Historically a significant trade route.
 - **Bomdi La (Arunachal Pradesh):** Connects Arunachal Pradesh with Tibet.
 - **Zoji La (Jammu and Kashmir/Ladakh):** Connects the Kashmir Valley with Ladakh.
 - **Shipki La (Himachal Pradesh):** Connects Himachal Pradesh with Tibet.

📍 Major Rivers & Their Tributaries

- **Indus River System:**

- Originates in Tibet and flows through Ladakh and Pakistan into the Arabian Sea.
- Tributaries:
 - **Jhelum:** Flows through the Kashmir Valley.
 - **Chenab:** The largest tributary of the Indus.
 - **Ravi:** Flows through Himachal Pradesh and Punjab.
 - **Beas:** Originates in the Himalayas and flows through Himachal Pradesh and Punjab.
 - **Sutlej:** Originates in Tibet and flows through Himachal Pradesh and Punjab.

- **Ganga River System:**

- Originates in the Himalayas and flows eastward into the Bay of Bengal.
- Tributaries:
 - **Yamuna:** Originates in the Himalayas and joins the Ganga at Prayagraj (Allahabad).
 - **Gomti:** Originates in the plains and flows through Uttar Pradesh.
 - **Ghaghara:** Originates in Tibet and flows through Nepal and India.
 - **Kosi:** Known as the "Sorrow of Bihar" due to its frequent floods.

- **Peninsular Rivers:**

- These rivers originate in the Western Ghats and flow eastward into the Bay of Bengal or westward into the Arabian Sea.
 - **Godavari:** The longest peninsular river.
 - **Krishna:** Another major river flowing eastward.
 - **Kaveri:** Flows through Karnataka and Tamil Nadu.
 - **Narmada:** Flows westward into the Arabian Sea.
 - **Tapi (Tapti):** Also flows westward into the Arabian Sea.

- 📌 **Lakes of India**

- **Wular Lake (Jammu and Kashmir):** The largest freshwater lake in India.
- **Chilika Lake (Odisha):** The largest brackish water lake in India.
- **Vembanad Lake (Kerala):** A long brackish lagoon along the Kerala coast.
- **Pulicat Lake (Andhra Pradesh and Tamil Nadu):** A brackish lagoon.
- **Loktak Lake (Manipur):** Known for its floating phumdis (heterogeneous mass of vegetation, soil, and organic matter).

- 📌 **Mountains & Plateaus**

- **Western & Eastern Ghats:**
 - These are mountain ranges along the western and eastern coasts of India.
 - The Western Ghats are higher and more continuous than the Eastern Ghats.
- **Deccan Plateau:**
 - A large plateau in southern India, formed by volcanic activity.
- **Chhota Nagpur Plateau:**
 - Located in eastern India, rich in mineral resources.

- 📌 **Deserts & Wetlands**

- **Thar Desert (Rajasthan):** A large arid region in northwestern India.
- **Rann of Kutch (Gujarat):** A salt marsh region.
- **Sundarbans (West Bengal):** The largest mangrove forest in the world, located in the delta of the Ganga and Brahmaputra rivers.

- 📌 **Coastal Regions & Islands**

- **Andaman & Nicobar Islands:**
 - A group of islands in the Bay of Bengal.
- **Lakshadweep Islands:**
 - A group of coral islands in the Arabian Sea.
- **Important Ports:**
 - These ports facilitate trade and commerce.
 - **Mumbai (Maharashtra):** A major port on the west coast.
 - **Chennai (Tamil Nadu):** A major port on the east coast.
 - **Kochi (Kerala):** A major port on the southwest coast.
 - **Visakhapatnam (Andhra Pradesh):** A major port on the east coast.

