

1. Definition of Minerals

- Minerals: Naturally occurring substances, solid or liquid, formed by geological processes, used for industrial, agricultural, or domestic purposes.
- Importance: Industrial growth, energy production, export, economic development

2. Classification of Minerals

A. Metallic Minerals

• Contain metals → Can be extracted economically

Mineral	Major States	Uses / Notes
Iron Ore	Odisha, Chhattisgarh, Jharkhand, Karnataka	Steel production → Bhilai, Rourkela, Jamshedpur
Manganese	Odisha, Madhya Pradesh, Maharashtra	Steel alloy, batteries
Copper	Rajasthan, Jharkhand, Madhya Pradesh	Electricals, wires
Bauxite	Odisha, Gujarat, Jharkhand	Aluminium production
Gold	Karnataka, Jharkhand, Kerala	Jewelry, electronics

Lead & Zinc	Rajasthan (Zawar),	Batteries, alloys
	Andhra	
	Pradesh	

B. Non-Metallic Minerals

 $\bullet~$ Do not contain metals \rightarrow Used in industry, agriculture, domestic use

Mineral	Major States	Uses / Notes
Mica	Jharkhand, Bihar, Rajasthan	Insulators, electronics
Limestone	Rajasthan, Madhya Pradesh, Chhattisgarh	Cement, steel
Gypsum	Rajasthan, Tamil Nadu	Fertilizers, plaster
Graphite	Karnataka, Odisha	Lubricants, pencils
Asbestos	Rajasthan, Jharkhand	Fire-resistant material
Phosphate	Rajasthan, Odisha	Fertilizer production

Mineral	Major States	Uses / Notes
Coal	Jharkhand, Chhattisgarh, Odisha, West Bengal	Thermal power, steel industry
Petroleum & Natural Gas	Gujarat, Assam, ONGC fields (Mumbai, KG basin)	Fuel, fertilizers, petrochemic als
Uranium	Jharkhand, Andhra Pradesh	Nuclear energy
Thorium	Kerala (Monazite sands)	Nuclear energy, research

3. Distribution of Minerals in India

- Eastern India → Iron, Manganese, Bauxite → Odisha, Jharkhand, Chhattisgarh
- Southern India → Gold, Iron, Mica → Karnataka, Andhra Pradesh
- Western India → Limestone, Manganese, Bauxite → Rajasthan, Gujarat
- North-Eastern India → Petroleum, Coal → Assam, Arunachal Pradesh

4. Important SSC Points - Minerals

- India → Mineral-rich country → Major reserves of Coal, Iron, Bauxite, Manganese
- Coal → Jharkhand, Chhattisgarh → Thermal power
- Iron → Odisha, Chhattisgarh → Steel plants
- Bauxite → Odisha, Gujarat → Aluminium
- Copper → Rajasthan, Jharkhand → Electricals & alloys
- Petroleum → Assam, Gujarat, Mumbai High → Fuel & petrochemicals
- Gold → Karnataka → Jewelry, electronics
- Mica → Jharkhand & Bihar → Electronics & insulators

5. Notes for SSC Exam

- Metallic minerals → Steel, construction, electricals
- Non-metallic minerals → Fertilizers, cement, glass, ceramics
- Energy minerals → Coal, Petroleum, Uranium, Thorium → Power & fuel
- Mineral distribution → Correlates with geography → Eastern plateau, Deccan plateau,
 Western & North-Eastern regions