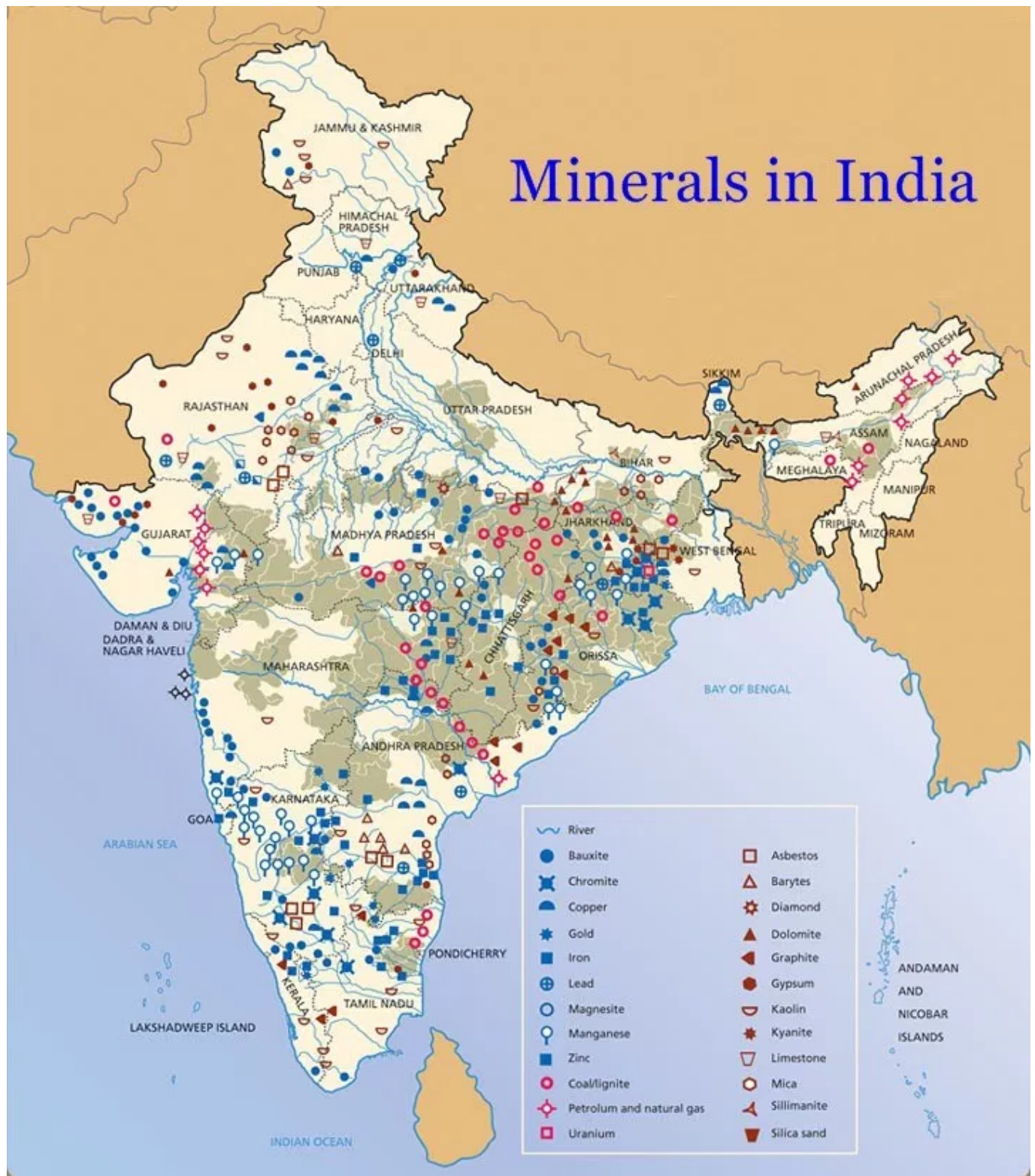
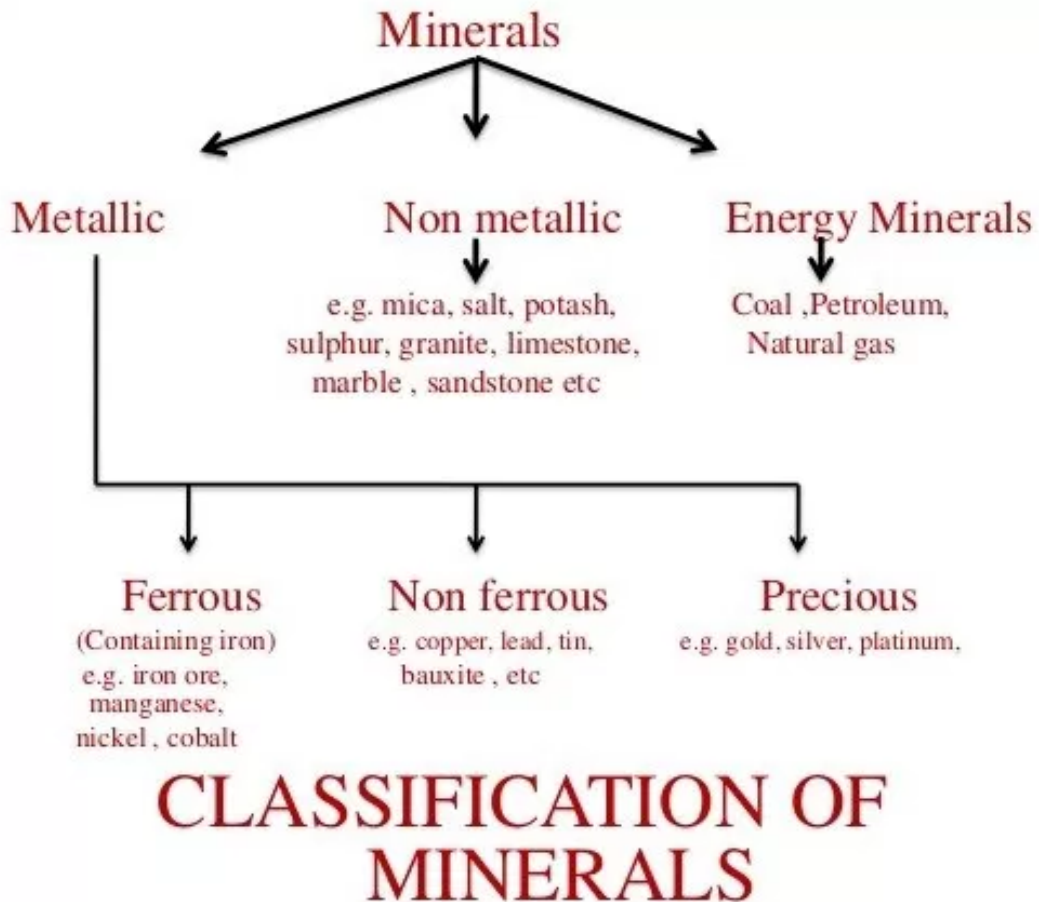


Chapter 7. Minerals in India





Question 1: What do you understand by the term 'mineral ore'?

Answer: Metallic minerals are extracted from the earth in raw state, it is known as 'mineral ore'.

Question 2: What are the four main varieties of coal?

Answer: Anthracite, Bituminous Lignite and Peat.

Question 3: Give the main uses of any two of them.

Answer: (i) Anthracite: It is clean to handle and has a high heating value.
(ii) Lignite: Its by-products can furnish several materials for industries.

Question 4: Which state ranks first in Gondwana coal?

Answer: Important coal producing state is 'Jharkhand' and coal field is 'Jharia'.

Question 5: Where does India stand in the production of coal?

Answer: India ranks fifth amongst the countries of the world.

Question 6: Why does India have to import oil?

Answer: India has to import oil to meet the ever increasing industrial and domestic demands.

Question 7: What are the uses of petroleum?

Answer: It is used as a source of power and fuel for automobiles, aeroplanes, ships and locomotives.

Question 8: Where are oil deposits largely found in India?

Answer: In the off-shore sea near Mumbai.

Question 9: What is the position of India in the list of iron-ore producing countries in the world?

Answer: India gains the 9th position in the list of iron-ore producing countries in the world.

Question 10: Which state is the largest producer of mineral oil?

Answer: Assam is the main oil producing state.

Question 11: Which is the best quality iron ore?

Answer: The different types of iron ore found in India are: (i) Haematite, (ii) Magnetite, (iii) Limonite, Magnetite is the best quality iron ore.

Question 12: How is the low grade iron ore utilized?

Answer: The inferior Variety is often used in manufacturing sponge iron and converted into pellets and then exported.

Question 13: Which state is the leading producer of the following minerals?

(i) Coal (ii) Oil (iii) Manganese.

Answer: (i) Coal: Jharkhand (ii) Oil: Maharashtra.
(iii) Manganese: Orissa (Odisha).

Question 14: How has bauxite found its place in the aircraft industry?

Answer: Because Aluminium which is processed from it is light and resists rust.

Question 15: Name any two industrial products for which limestone is used as a source of raw material.

Answer: Two industrial products for which lime stone is used are:

(i) Iron and Steel Industry
(ii) Cement Industry.

Question 16: Give two uses of bauxite besides manufacture of aluminium .

Answer: (i) Used in place of iron sheets where durability is not required,
(ii) In tanning leather and refining mineral oil.

Question 17: Give two uses of limestone.

Answer: (i) Used in the manufacture of cement and chemicals.
(ii) As a fluxing material iron and steel industry.

Short Questions

Question 1: Which varieties of coal is used for domestic purposes and why?

Answer: Bituminous Coal: This coal is most popular because it has 70% to 80% Carbon content and accounts for 98% of the total reserves.

Question 2: Classify the coal fields in India. Name state for each classification.

Answer: (i) Anthracite Coal : Jammu Kashmir
(ii) Bituminous Coal : Orissa
(hi) Lignite : Tamil Nadu
(iv) Peat : Madhya Pradesh

Question 3: What is lignite? Name the two areas where lignite is found in India.

Answer: Lignite refers to inferior variety coal which contains about 40% of carbon and a good amount of moisture and less of combustible matter. Two states where lignite is found are Tamil Nadu and Gujarat.

Question 4: Why petroleum is called mineral oil? Write its two uses.

Answer: Petroleum is oil obtained from sedimentary rocks of the earth. So it is called mineral oil uses—(i) as a fuel (ii) as a raw material for various petro-chemical products.

Question 5: Mention two uses of mineral oil.

Answer: Two Uses of Mineral Oil:
(a) Mineral oil is used in Transport sector it uses 50% of the total production.
(b) Agriculture sector uses Diesel and Kerosene.

Question 6: Name an old and a new mineral oil producing area.

Answer: Old mineral oil producing area is of Eastern Region of Himalayas in Assam. Digboi oil field, New mineral oil producing area in Tripura, Punjab, Nagaland etc.

Question 7: Mention two products of an oil refinery. Name two oil refineries in India, one along the coast and one away from the coast.

Answer: Products of an oil refinery:
(i) Lubricants (ii) Kerosene
Oil refineries along the coast—Vishakhapatnam Oil refineries away from the coast—Bangigon.

Question 8: What is 'off-shore drilling'? What do you mean by 'Mumbai High'?

Answer: The Oil and Natural Gas Commission of India since 1956, has started oil exploration in the off-shore areas which is known as off-shore drilling. In 1973, it has begun drilling for oil in the deep waters off the western coast of Mumbai which is known as Mumbai High.

Question 9: What type of Iron Ore is mined in India? Name the two largest producing states of Iron-ore.

Answer: Superior quality of iron-ore called Haematite is mined in large quantity. The main producing states are Jharkhand and Orissa.

Question 10: What is manganese used for?

Answer: Manganese is a key metal used in manufacturing special types of steel. It is also used in several chemical and electrical industries, glass, ceramics.

Question 11: Give four economic uses of mineral resources.

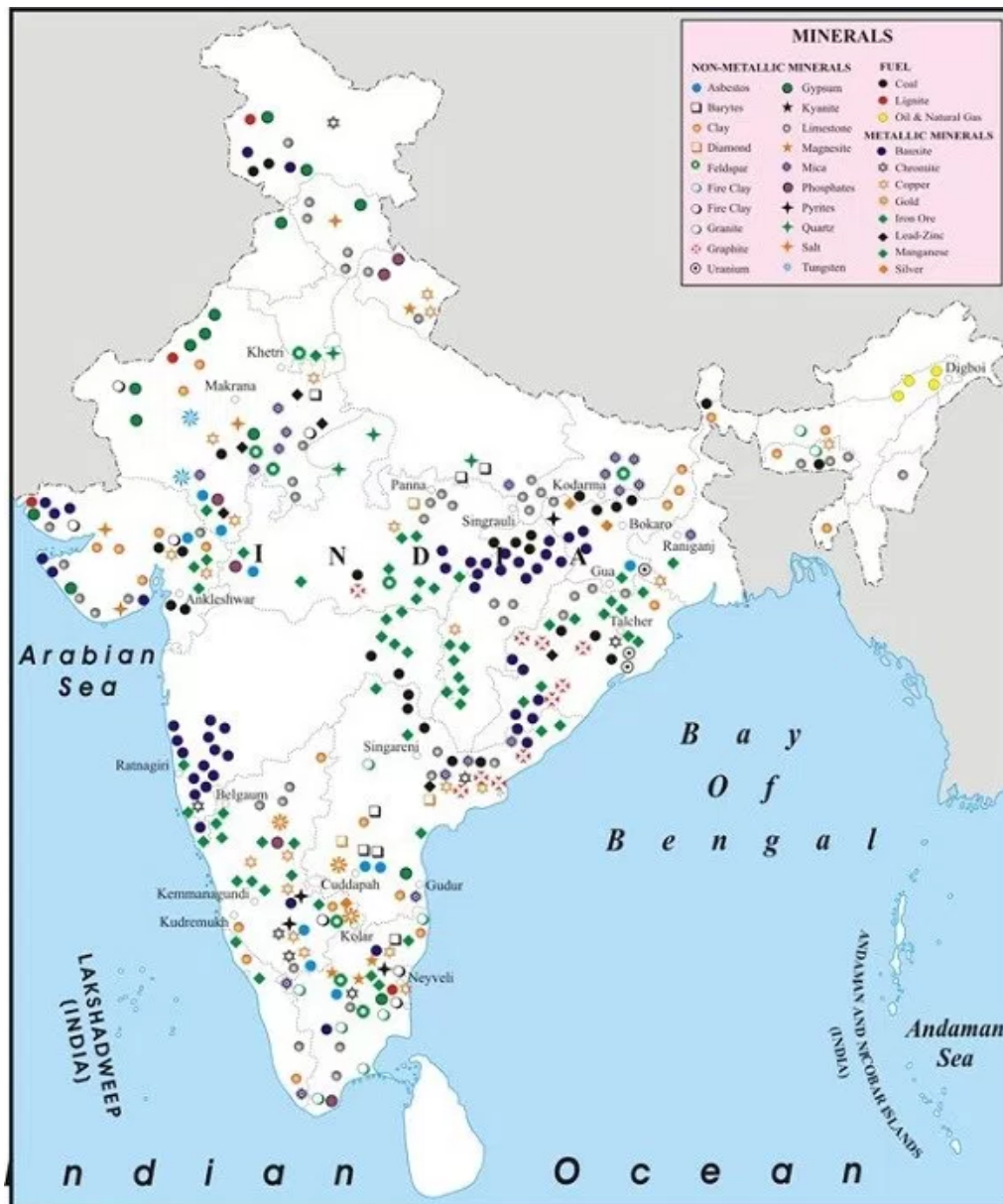
Answer: Mineral resources are useful in four ways:

- (i) They form the basis for industries.
- (ii) Means of communication depend upon them.
- (iii) They are the source of energy, e.g., coal and petroleum.
- (iv) Earn foreign exchange by exports.

Long Questions

Question 1: State the most important coal fields of India.

Answer: Andhra Pradesh — Singareni
Madhya Pradesh — Korba Singrauli and Kanhan Valley
Orissa — Talcher, Dhenkanal and Sambalpur
Maharashtra — Mohapani and the Wardha Valley
Tamil Nadu — Neyveli
West Bengal — Raniganj: Purulia, Bankura and Burdwam.
Bihar — Harzaribagh Distt: Jharia, Bokaro, Karanpura and Giridih.



Question 2: State two main drawbacks of the Coal found in India.

Answer: The main drawbacks of coal found in India are:

- All major coal fields are confined to Bihar, Madhya Pradesh, Orissa and West-Bengal causing heavy transport cost to distribute coal across long distances in the country.
- Indian coal has high ash content and low calorific value. This reduces the energy output of coal and complicates the problem of ash disposal.
- It is not of very good quality.
- It is concentrated in the region of Chhota Nagpur Plateau.

Question 3: Name some important iron-ore producing centres in India.

Answer: Some important iron-ore producing centres in India are:

- Bastar, Balaghat, Durg and Rajnagar districts in Madhya Pradesh.
- Mayurbhanj, Keonjhar and Bonai in Orissa.
- Singbhum in Jharkhand.

- (iv) Bellary, Hospet, Sandhar, Bababudan Hills and Kudremukh in Karnataka.
- (v) Tiruchchirappalli and Salem in Tamil Nadu.
- (vi) Sanguelim, Sanguem, Satari, Ponda and Bicholim in Goa.
- (vii) Chandrapur and Ratnagiri in Maharashtra.
- (viii) Warangal and Kurnool in Andhra Pradesh.
- (ix) Kozikode in Kerala.

Give Reasons

Give Geographical Reasons for the following:

Question 1: Mention two reasons why minerals are important?

Answer: Minerals are important because availability of it affects the development of a country. Agriculture is also affected by the availability of minerals in the form of fertilisers.

Question 2: The location of coal fields is an important factor in industrial development.

Answer: Coal is a bulky and heavy raw material. Industries located away from coalfields incur huge transport costs and it thus affects the cost of production on a large scale.

Question 3: Anthracite is used for domestic purposes.

Answer: Anthracite is used for domestic purposes as it has very high carbon content and emits very less smoke.

Question 4: Oil refineries are located close to oil fields or near ports.

Answer: Oil refineries located near the oil fields help to transport crude oil through pipelines and hence reducing the transport cost. Moreover if located near the port it helps to import the oil and its export by products.

Question 5: Why are many refineries located near the sea ports:

Answer: Many refineries are located near the sea ports as to minimise the cost of transport and to avoid the risk of transporting it inside the country due to its inflammable nature.

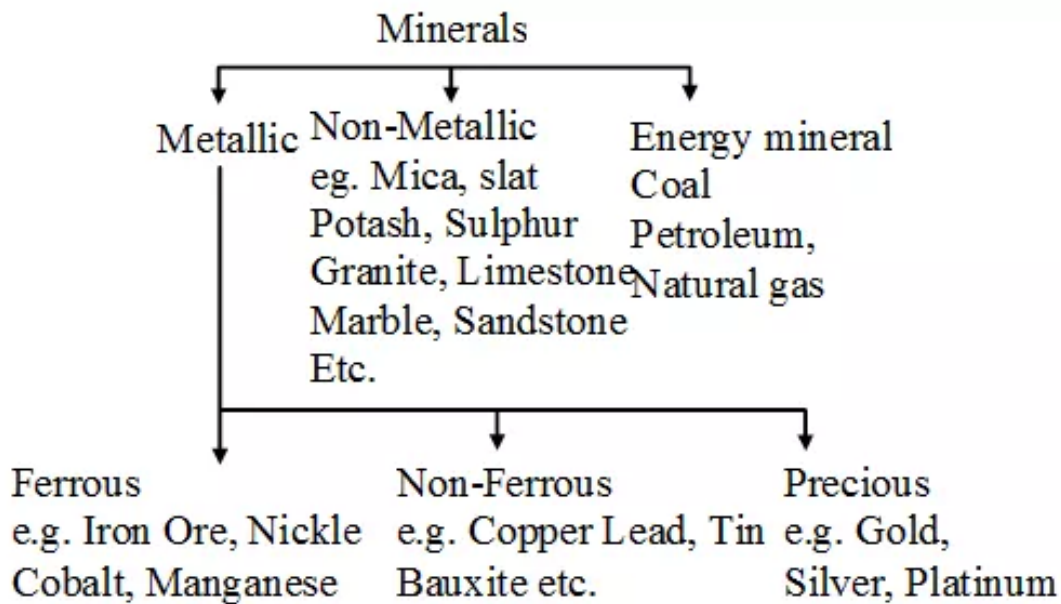
Question 6: Why is bauxite considered an important mineral?

Answer: Bauxite is used in manufacture of aluminium which being light in nature finds its use in aircraft.

Differentiate

Question 1: State the difference between metallic minerals and non-metallic minerals.

Answer: Metallic minerals are hard, heavy and lustrous. Whereas Non-metallic minerals lack in these qualities.



Name the Following

Question 1: Name the groups into which minerals can be classified.

Answer: Minerals can be categorized into two groups: Metallic minerals and Non-metallic minerals.

Question 2: Name some metallic minerals.

Answer: The important metallic minerals are iron, copper, tin, zinc, lead, silver and gold.

Question 3: Name some non-metallic minerals.

Answer: Some non-metallic minerals are sulphur, phosphorus, carbonate, etc.

Question 4: Name some Energy Minerals.

Answer: Coal and Petroleum.

Question 5: Which country ranks first in South Asia with regard to easy availability of minerals?

Answer: India.

Question 6: Name the states rich in mineral resources.

Answer: Indian states which are rich in mineral resources are: (i) Bihar, (ii) M.P., (iii) West Bengal, (iv) Gujarat, (v) Assam.

Question 7: Name the four types of coal. Which of these is the best for industrial purposes?

Answer: Anthracite, bituminous, lignite and peat.
Bituminous is the most important as it is used for smelting iron ore.

Question 8: Name an important coal producing State in India and a coal-mine located in that State.

Answer: Jharkhand, Jharia.

Question 9: Name three important states which form the tertiary coal distribution chain.

Answer: Assam, Jammu and Kashmir and Rajasthan.

Question 10: Name any two important petroleum drilling centres for each of these states:
(i) Gujarat (ii) Assam

Answer: (i) Ankaleshwar and Kalol (ii) Digboi and Moran.

Question 11: Name two oil refineries in the public sector one each in Assam and Gujarat.

Answer: Assam — Digboi.
Gujarat — Luny.

Question 12: Name two states in India where Iron-ore is found on a large scale.

Answer: Orissa and Jharkhand.

Question 13: Which is the biggest iron-ore producing state of India?

Answer: Orissa contributes about 33 percent of the total annual production of iron-ore.

Question 14: Name the important iron-ore producing centre of Maharashtra.

Answer: Ratnagiri district in Maharashtra has large deposits of iron-ore.

Question 15: State the SAARC country which-has the largest Iron Ore reserves. Mention two states in the country named by you, where the reserves are abundant.

Answer: India is the SAARC country which has largest Iron ore reserves.
Jharkhand and Orissa have iron-ore in abundance.

Question 16: Name two important Oil fields in India.

Answer: (i) Mumbai High (ii) Digboi.

Question 17: Name the following:

- (i) Oldest oil field (ii) Off-shore oil field
- (iii) Oldest coal mine (iv) Coal mine in Orissa.
- (v) Iron ore mine in Karnataka

Answer: (i) Digboi (ii) Mumbai High
(iii) Rangang (iv) Talcher
(v) Bababudan Hills.

Question 18: Name the States producing Manganese

Answer: The ore is found in Orissa, Andhra Pradesh, Karnataka, Maharashtra (Ratnagiri, Bhandara and Nagpur Districts). Madhya Pradesh (Balaghat and Chhindwara Districts).

Question 19: Name one use of the mineral manganese.

Answer: It is widely used in electrical industries. In the smelting of iron ore and to convert it into steel.

Question 20: Name the mineral: Which is used in the manufacture of cement.

Answer: Limestone.

Question 21: The largest deposits of which are found in Balaghat in Madhya Pradesh.

Answer: Manganese.

Question 22: Name any two off-shore oil fields of India.

Answer: Off shore oil fields of India are:
(i) Mumbai high (ii) Aliabet in western India.

Question 23: Name the oldest and the largest coal field in India.

Answer: The oldest coal field in India is Raniganj coal field and the largest coal field in India is Jharia coal field.

Question 24: Name any two raw materials derived from coal.

Answer: Coal itself is a raw material for many industries but energy derived from it serves as a raw material for generating thermal electricity. It also provides fuel to supply heat or light or both.

Question 25: Name two industries that use a high quantity of coal.

Answer: Iron and Steel Industry, Sugar Industry.

Question 26: Name one important area that has large coal deposits in the states of Jharkhand and West Bengal.

Answer: Coal Centre in Jharkhand – Jharia, West Bengal – Raniganj.

Question 27: (i) Which state is the largest producer of mineral oil?
(ii) Name two coastal and two inland oil-refineries in India.

Answer: (i) Largest producer of mineral oil is Assam
(ii) Two coastal refineries are Kochi and Chennai
Two Inland refineries are Barauni and Mathura.

Question 28: Name two varieties of iron ore used in industry.

Answer: Haematite, Magnetite.

Question 29: Name one area in Orissa and one area in Chattisgarh where iron ore is mined.

Answer: Iron ore mined in Orissa: In Keonjhar.
Iron ore is mined in Chhattisgarh: In-Durg district.

Question 30: Name the mineral used in the manufacture of:
(i) Cement (ii) Aluminium (iii) Synthetics.

Answer: (i) Cement: Limestone (ii) Aluminium: Bauxite
(iii) Synthetics: Mineral Oil

Question 31: Name the metal obtained from Bauxite.

Answer: Aluminium.

Question 32: Name three states which are the largest producers of bauxite.

Answer: Jharkhand, Chhattisgarh and Madhya Pradesh which produce about 50% of India's output.

Question 33: Name the three types of iron-ore?

Answer: These are: Haematites (Fe_2O_3), Magnetites (Fe_3O_4) and Limonites.