## **GEOGRAPHY**

# MINERAL AND ENERGY RESOURCES STD VIII

Q1. What are ores?

A1. Ores are rocks containing a particular mineral in large quantities which can be extracted profitably.

Eg. Bauxite is an ore of Aluminum, Galena is a ore of lead.



Q2. Name 4 important minerals of South America?

A2. They are-

Iron ore

Copper

Bauxite

Mica.

Silver.

Q3. What are metallic and non metallic minerals?

A3. Metallic mineras- These minerals that contain metals in them.They can also be classified as ferrous and non-ferrous minerals depending on their iron content.

For eg. Iron ore and Chromite are ferrous minerals .

Silver and Copper are non ferrous minerals.

Non-metallic minerals- These minerals don't contain any metal. For eg. Mica , limestone, gypsum.

Q4. Give an account of mineral wealth in North America.

A4. North America has large deposits of minerals like copper, silver, lead, zinc, nickel, iron ore and gold.

\*Iron ore is mined in the eastern part of the Canadian Shield and in the Appalachian mountains.

\*Copper is mined from Western Cordilleras.

\*Canada is an important producer of zinc and nickel , \*Mexico produces silver.

\*Deposits of Potash and Phosphates are also found in North America.

Q5. Why do you think plains are composed chiefly of sedimentary rocks?

A5. Plains are formed due to the large scale deposition of sediments due to which sedimentary rocks like limestone and sandstone are generally found here.

Q6. From which ore is aluminium extracted? What are the uses of aluminum?

A6. Aluminum is extracted from Bauxite.

It is used in the manufacture of automobiles , utensils , paints and in electrical wires.

Q7. Why is gold mining expensive in the Kolar region of Karnataka?

A7. Gold mining is expensive in the Kolar region of Karnataka because the mining are very deep and the mining process needs a lot of investments.

Q8. Name the chief petroleum producing regions of India.

A8. The chief petroleum producing regions of India are-

Digboi in Assam.

Gulf of Kambat , Ankaleshwar and Kalol in Gujarat.

Bombay High in Maharashtra.

Kaveri delta.

Q9. How is mica useful? Where is it in India?

A9. \*Mica is used in electrical goods industry as it is an insulator.

\*It is used in making paints and varnishes.

\*Some of the important mica mines are located in Koderma in Jharkhand, Andhra Pradesh, Telangana, Maharashtra , Rajasthan.

Q10. Which region is richest in India in coal? Mention three uses.

A10. The region in India which is very rich in coal deposits is the Chhotanagpur plateau area. \*Jharia and Bokaro(Jharkhand), Raniganj(West Bengal), Singrauli(Madhya Pradesh), Talchar(Odisha) are some of our major coalfields in India.

Some of uses of coal are-

\*It is used as a domestic fuel.

\*Used in Iron and steel industries for smelting iron.

\*It is used to generate thermal energy.



Q11. Why are petroleum and natural gas popular form of energy? Mention some of their other uses.

A11. \*Petroleum and natural gas are popular sources of energy because they have high calorific value as compared to coal.

\* They are easy to transport with a network of pipelines.

\*On burning , they do not leave any residue hence they are comparitively greener fuels.

Some other use of petroleum and natural gas are-

\*Petroleum is used as a raw material in petrochemical industry.

\*The fractional distillation of crude oil yields different products like diesel , petrol, kerosene , asphalt which are of many uses.

\* Petrol and diesel are used to run vehicles.

Kerosene is used as a fuel for cooking and lightning \*Asphalt is used in road surfacing and water proofing.

\*Natural gas is used as domestic and industrial fuel in the form of LPG (liquified petroleum gas) and CNG(compressed natural gas) respectively.

Q12. Name some nuclear power plants of India.

A12. The nuclear powers in India are-

Narora in U.P.

Rawatbhata and Kota in Rajasthan.

Kakrapar in Gujarat.

Tarapur in Maharashtra.

Kaiga in Karnataka.

Kalpakkam in Tamil Nadu.



Q13. Mention some advantages of biogas.

- A13. Some of the advantages of biogas are-
- \*It is a renewable source of energy.

\*It is inexpensive because it is generated from biodegradable waste.

\*It doesn't cause any pollution.

\*There is optimum utilisation of the waste because the semisolid slurry left after the generation of the biogas is uses as manures in the field.



Q14. Mention advantages and disadvantages of hydel power as a source of energy.

A14. The advantages of hydel power as a source of energy-

\*It is renewable and non-polluting energy source.

\*It can be used to generate power in those areas where mineral resources are scarce.

\*The dams that are built to generate electricity , help in irrigation, flood control fishing and recreation.

Some of the disadvantages associated with hydel energy are-

\*Dams are expensive to built.

\*The reservoir of water created behind the dam submerges a vast area of land hence destroys the bio diversity of that area.

\*It also causes rehabilitation problems for the people living nearby.

\*It can also trigger floods and earthquakes.



Q15. Write a note on conservation of mineral and power resources.

A15. Resources need to be conserved because-\*Most of the resources are exhaustible and finite. \*As the population is increasing , the demand is also increasing and hence there is excessive use of these resources.

\*Most of these are polluting and pose a serious threat to the environment.

\*Injudicious use of these resources may result in energy crisis and resource crunch.

Thus we need to take certain steps to conserve our mineral resources-

\*Using improved mining technology to minimise waste during extraction.

\*Judicious amd selective mining.

\*Recycling metallic mineral like iron tin , aluminium by reusing discarded objects made from these.

\*Using cheaper and more alternatives of scarce minerals for example, using aluminium in place of copper.

\*Using inexhaustible sources of power instead of exhaustible sources.

\*Judicious industrialisation and urbanisation.

Q16. Name some alternative sources of energy.

#### A16. \*Solar energy



\*Wind energy.

## \*Tidal energy.

\*Geothermal energy.

Q16. Name some of the hydel power plants in India.

A16. Some of them are-

\*Nagarjunasagar in AndhraPradesh.

\*Mettur in Tamil Nadu

\*Hirakud in Odisha.

\*Damodar valley in West Bengal and Jharkhand.

\*Sardar sarovar in Gujarat.

Q17. Name any two states in India, where wind turbines are set up.

A17. The two states are-

\*Rajasthan.

\*Gujarat.

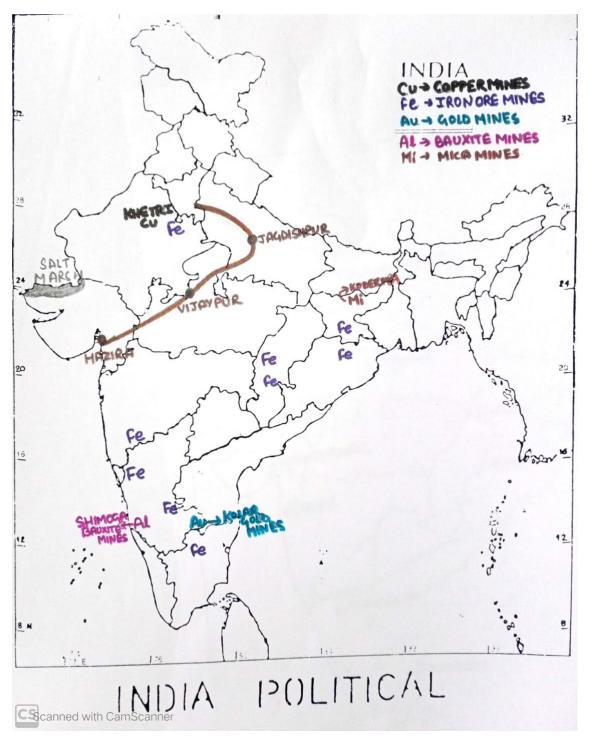


Q17. Map Work-

- \*On a political map of India , mark these-
- **HVJ** pipelines
- Salt Marsh.
- Khetri copper mines
- Koderma mica mines
- Shimoga bauxite mines.

#### Kolar gold mines.

#### Iron ore mines.



\*On a poltical map of india mark 5 nuclear and 5 hydel power plants.

-Nuclear power plants

Narora

Tarapur

Kaiga

Kalpakkam

Kota

-Hydel power plants

Bhakra nangal

Damodar valley.

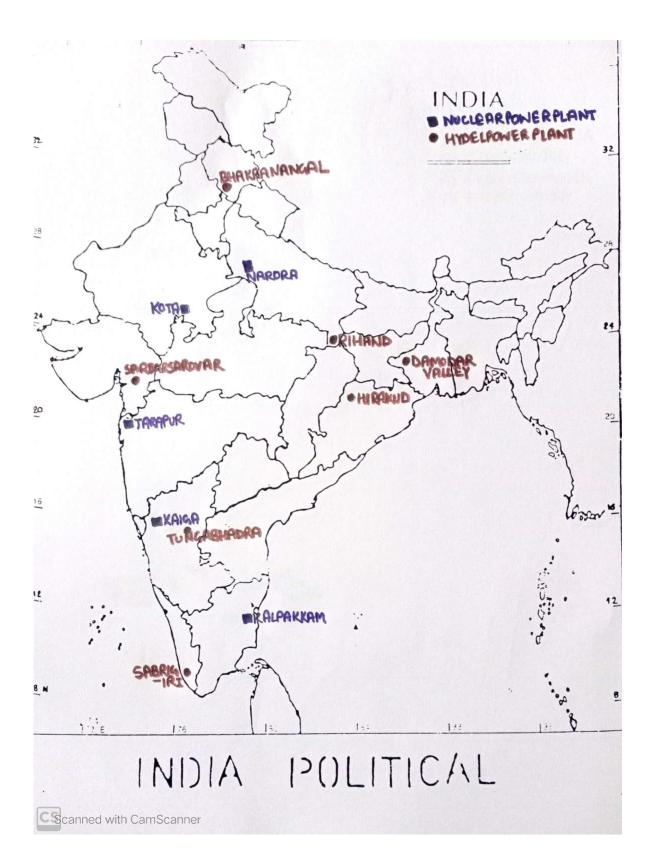
Sardar sarovar.

Hirakud

Tungabhadra

Rihand

Sabrigiri.



\*On a political map of India mark the following -

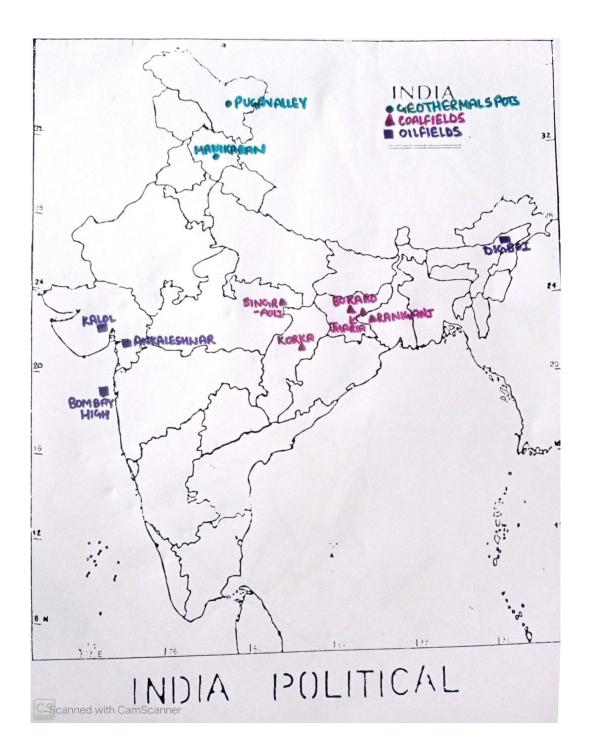
Oilfields- Digboi, kalol, Ankaleshwar, bombay high.

Coalfields- bokaro, Jharia, Raniganj, Singrauli, korka.

\*Geothermal spots-

Manikaran.

Puga valley.



# Do it yourself-

\*On a political map of India mark any 5 eastern and 3 western coast sea ports.