

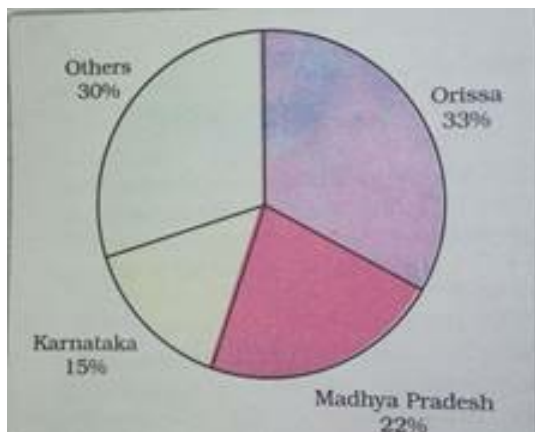
CBSE Test Paper - 05

Chapter - 13 Minerals and Energy resources

1. Which minerals account for about three-fourths of the total value of the production of metallic minerals? **(1)**
 - a. non-ferrous
 - b. ferrous
 - c. rock minerals
 - d. coal
2. Which of the following minerals are formed due to alluvial deposits? **(1)**
 - a. iron, coal
 - b. gold, silver
 - c. magnesium, gypsum
 - d. sodium, potassium
3. _____ is found in association with rocks composed of calcium carbonates or calcium and magnesium carbonates. **(1)**
 - a. Limestone
 - b. iron
 - c. bauxite
 - d. coal
4. In India, coal is the most abundantly available _____ fuel. **(1)**
 - a. light
 - b. rock
 - c. energy
 - d. fossil
5. Which one of the following minerals is formed by decomposition of rocks, leaving a residual mass of weathered material? **(1)**
 - a. gold

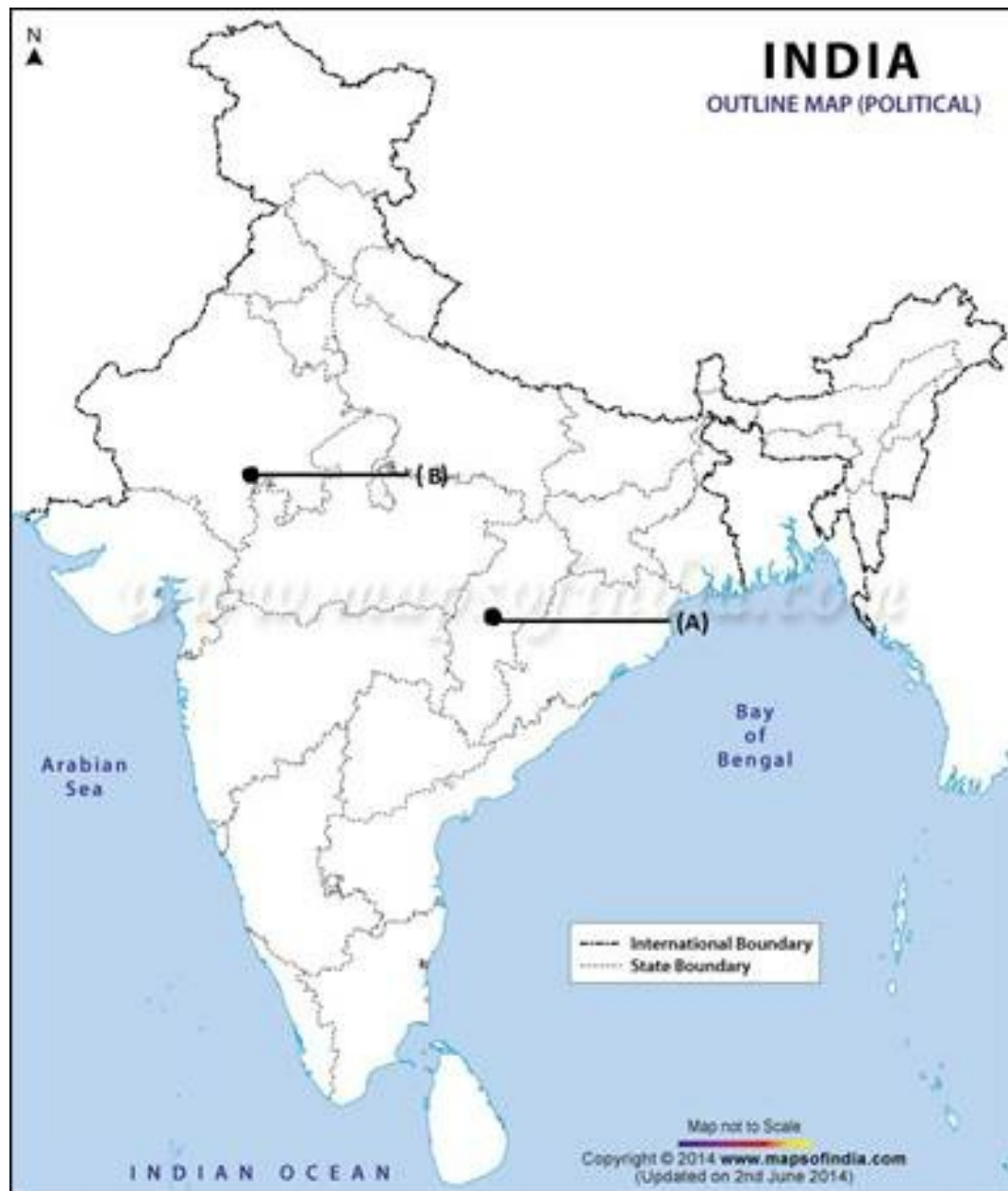
- b. bauxite
- c. zinc
- d. coal

6. Why aluminium metal has great importance? **(1)**
7. What is an ore? **(1)**
8. How are 'Gobar Gas Plants' beneficial to the farmers? **(1)**
9. Give a list of minerals found in placer deposits. **(1)**
10. Why the use of firewood and dung cake should be discouraged? **(3)**
11. How do decomposition and weathering influence formation of minerals? Name a mineral formed due to decomposition and weathering. **(3)**
12. 'Toothpaste is a combination of various minerals'. Support the statement with suitable examples. **(3)**
13. Study the given chart carefully and answer the following questions:
 - a. Which state is the largest producer of manganese in India?
 - b. What is the use of manganese?
 - c. What is the share of Madhya Pradesh in the production of manganese ore? **(3)**



14. i. Two features A and B are marked in the given political map of India. Identify these features with the help of the following information and write their correct names on the lines marked on the map.
 - a. A Coal Mine

- b. Nuclear Power Plant
- ii. Locate and Label Mangalore iron ore exporting port with appropriate symbols on the same map given for identification **(3)**



15. "Conservation of minerals is the need of the hour" support the statement with five facts. **(5)**

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Answer

1. b. ferrous

Explanation: Ferrous minerals account for about three-fourths of the total value of the production of metallic minerals. They provide a strong base for the development of metallurgical industries. India exports substantial quantities of ferrous minerals after meeting her internal demands.

2. b. gold, silver

Explanation: Certain minerals may occur as alluvial deposits in sands of valley floors and the base of hills. These deposits are called 'placer deposits' and generally contain minerals, which are not corroded by water. Gold, silver, tin and platinum are most important among such minerals.

3. a. Limestone

Explanation: Limestone is found in association with rocks composed of calcium carbonates or calcium and magnesium carbonates. It is found in sedimentary rocks of most geological formations. Limestone is the basic raw material for the cement industry and essential for smelting iron ore in the blast furnace.

4. d. fossil

Explanation: In India, coal is the most abundantly available fossil fuel. It provides a substantial part of the nation's energy needs. It is used for power generation, to supply energy to industry as well as for domestic needs.

5. b. bauxite

Explanation: Bauxite deposits are formed by the decomposition of a wide variety of rocks which are rich in aluminium silicates, leaving a residual mass of weathered material.

6. It has great importance because it combines the strength of metals such as iron with extreme lightness and also with good conductivity and great malleability.

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7. The term ore is used to describe an accumulation of any mineral mixed with other elements.
 8. 'Gobar Gas Plants' are beneficial to the farmers in the form of energy and improved quality of manure. The manures of the gobar gas have the capacity to increase the strength of the soil.
 9. Gold, silver, Tin, and Platinum are cassiterite, magnetite, chromite, ilmenite, rutile, native copper, zircon, monazite are important minerals found in placer deposits.
 10. Firewood and dung cattle dung cake are most common in rural India. According to one estimate more than 70 per cent energy requirement in rural households is met by these two. Continuation of these is increasingly becoming difficult due to decreasing forest area. Moreover, using dung cakes too is being discouraged because it consumes most valuable manure which could be used in agriculture.
 11. Decomposition and weathering influence formation of minerals. Decomposition involves reduction of surface rocks under the effect of pressure, temperature and humidity. Whereas, due to weathering effects of wind and water the soluble constituents are removed, leaving a residual mass of weathered material containing ores.
Bauxite is formed due to decomposition and weathering.
 12. Yes, toothpaste is a combination of so many minerals. Toothpaste cleans our teeth. Abrasive minerals like silica, limestone, aluminum oxide and various phosphate minerals do the cleaning. Fluoride which is used to reduce cavities, comes from a mineral fluoride. Most toothpaste is made white, with titanium oxide, which comes from minerals called rutile, ilmenite and anatase. The sparkle in some toothpaste comes from mica. The toothbrush and tube containing the paste are made of plastics from petroleum.
 13.
 - i. Odisha is the largest producer of manganese ore in India.
 - ii. Manganese is mainly used in the manufacture of steel.
 - iii. Madhya Pradesh produces about 22% of the total manganese.

14.



15. **Conservation of minerals is the need of the hour:**

- a. Minerals are considered to be the backbone of the Indian economy.
- b. Industry and agriculture sector depends on mineral deposits.
- c. Total volume of workable mineral deposits is only 1% of the earth's crust.
- d. Mineral resources are being consumed rapidly, and also requires millions of years to be created and concentrated.
- e. The geological processes of mineral formation are so slow that the rates of replenishment are infinitely small in comparison to the present rates of consumption
- f. The rich mineral deposits of our country are extremely valuable but short-lived possessions.
- g. Minerals resources must be used in a planned and sustainable manner.
- h. By improvising the technology so that low-grade ores can be used profitably.