CBSE Test Paper - 04

Chapter - 09 Resources and Development

- Name the soil, which has adequate proportion of potash, phosphoric acid and lime.
 (1)
 - a. black soil
 - b. sandy soil
 - c. red soil
 - d. Alluvial soil

2. Iron–ore is an example of which kind of resource? (1)

- a. biotic
- b. breakable
- c. renewable
- d. non-renewable resource.
- 3. Why does Black soil become difficult to till in rainy season? (1)
 - a. more water will be there
 - b. becomes very hard.
 - c. becomes sticky when wet
 - d. water evaporates fast
- 4. The word 'Laterite' has been derived from the latin word 'later' which means_____. (1)
 - i. erosion
 - ii. Bricks
 - iii. stones
 - iv. fertile
- 5. Choose the correct example from the following for Biotic Resource: (1)
 - a. human beings
 - b. iron ore
 - c. book
 - d. table
- 6. Which type of soil is found in the river deltas of the Eastern Coast? (1)

- 7. Which type of soil is found in the piedmont zone of Western Ghats? (1)
- 8. Where in India badland topography is commonly found? (1)
- 9. What do you understand by reserve resources? (1)
- 10. Give three main features of the soil found in the river deltas of the Indian coast. (1)
- 11. Compare the diagrams given below and find out the land use category which had the highest increase during the period 1960-61 to 2008-09 and the category which had the highest decrease during the period. Give one major reason for each.



Source Directorate of Economics and Statistics, Ministry of Agriculture, 2008-09. (3)

- 12. What is sustainable economic development? Suggest any two ways in which resources can be used judiciously. **(3)**
- 13. Explain the two types of water erosion. (3)
- 14. What are 'resources'? Distinguish between renewable and non-renewable resources. (5)
- 15. Why is soil considered as a resource? Explain with five arguments. (5)

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Answers

1. d. Alluvial soil

Explanation: The chemical composition of the alluvial soils makes this group of soils as one of the most fertile in the world. The proportion of nitrogen is generally low, but potash, phosphoric acid and alkalies are adequate, while iron oxide and lime vary within a wide range. The porosity and texture provide good drainage and other conditions favourable for bumper crops like sugarcane, paddy, wheat and other cereal and pulse crops.

2. d. non-renewable resource.

Explanation: Non-Renewable Resources: It is a natural resource that is used up faster than it can be made by nature. It cannot be produced, grown or generated on a scale which can sustain how quickly it is being consumed. Once it is used up, there is no more available for future needs. Also considered non-renewable are resources that are consumed much faster than nature can create them. These resources take millions of years in their formation. Some of the resources like metals are recyclable and some like fossil fuels cannot be recycled and get exhausted with their use.

3. c. becomes sticky when wet

Explanation: This type of soil develop deep cracks during hot weather, which helps in the proper aeration of the soil. When wet, the soil becomes sticky and is difficult to work with. So the soil needs to be tilted after the first rains.

4. b. Bricks

Explanation: The word laterite has been derived from the Latin word that means brick. The laterite soil is formed under conditions of high temperature and heavy rainfall with alternate wet and dry periods, which leads to leaching of soil, leaving only oxides of iron and aluminum.

5. a. human beings

Explanation: Biotic Resources: These are obtained from biosphere and have

life such as human beings, flora and fauna, fisheries, livestock etc. Biotic resources are obtained from the biosphere (living and organic material), such as forests and animals, and the materials that can be obtained from them. Fossil fuels such as coal and petroleum are also included in this category because they are formed from decayed organic matter.

- 6. Alluvial Soil is found in the river deltas of the Eastern Coast.
- 7. Red and yellow soil are found in the piedmont zone/foothill of Western Ghats i.e. Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu.
- 8. Chambal basin is a major bad land region in India. Chambal Badlands of central India is one of the most extensive badlands in the world and are one of the four severely dissected landscapes within the Middle Alluvial Ganga Plains.
- 9. Reserves are those stocks of resources which can be put into use with the help of existing technical 'know-how', but their use has not been started. For example, river water can be used for generating hydroelectric power but presently, it is being utilised only to a limited extent. Thus, the water in the dams, forests etc is a reserve which can be used in the future.
- 10. The three main features of the soil found in the river deltas of the Indian coast (alluvial soil) are:
 - Alluvial soil is rich in minerals and nutrients -- highly fertile, and a good crop soil.
 It often contains gravel, sand and silt. The chemical content of the soil will depend on where it is located.
 - ii. The topography of the land will influence what runs off into the river that eventually forms the alluvial soil. It is also known as transported soil, as the soil has been transported by the rivers to its current location.
 - iii. It can also be described on the basis of age. The older alluvial soil, further away from the rivers, is known as Bangar, whereas the newer soil near the rivers is known as khadar.
- 11. The highest increase was in forest cover category and the highest decrease was in **barren and unculturable wasteland** category. It is discouraging to note that in

spite of massive efforts made by the government to increase forest cover, the area under other non-agricultural uses is still increasing. It is probably due to deforestation, overgrazing and natural hazards etc that forest cover is still below the outline which was set in the National Forest Policy (1952). The decline in barren and waste land can essentially be attributed to the increase in area under non-agricultural use due to massive urbanization and development of roads, railways and canals etc.

- 12. Sustainable economic development means development should take place without damaging the environment so that the developmental process in the present should not compromise with the needs of future generations. Two ways in which resources can be used judiciously are
 - i. **Resource planning:** Resource planning refers to the strategy for planned and judicious utilisation of resources. Resource planning is essential to bring about sustainable existence which is a part of sustainable development.
 - ii. **Resource conservation:** It is the ethical use and protection of valuable resources such as trees, minerals, wildlife, water and others. It focuses on maintaining the natural world in order to protect the sources of resources.
- 13. The two types of water erosion are:
 - i. <u>Sheet Erosion</u>: When the top layer of the soil is removed over a large area by the running water, it is called as sheet erosion. In such cases the top soil is washed away.
 - ii. <u>Gully Erosion</u>: The running water cuts through the clayey soils and makes deep channels as gullies. The land becomes unfit for cultivation and is known as bad land. In Chambal basin such lands are called ravines.
- 14. Everything available in our environment which can be used to satisfy our needs, provided, it is technologically accessible, economically feasible and culturally acceptable can be termed as 'Resource'.

Renewable and Non-renewable resources:

S.	Renewable Resources	Non-Renewable Resources
No.		

1.	Resources whose quantity is not reduced due to use and which can be repeatedly used without fear of exhaustion are termed as renewable resources, They are inexhaustible resources.	Substances whose stock get reduced and are gradually exhausted with use are termed as nonrenewable resources.
2.	Renewable resources exist in nature in infinite quantity,	non-renewable resources are present in limited quantity.
3.	The renewable resources regenerate/reproduce itself, faster than it is used up by the living organisms.	non-renewable resources either take centuries to regenerate itself, or they get extinct, so the scale at which it is regenerated is lower than that of its consumption.
4.	Examples: Solar and wind energy, water, forests, wildlife, etc.	Examples; Fossil fuels like coal, petroleum and minerals.

- 15. i. Soil is the most important renewable natural resource. It is the medium of plant growth and supports different types of living organisms on the earth.
 - ii. Soil is one of the world's most important natural resources. Together with air and water it is the basis for life on planet earth. It has many important functions which are essential for life.
 - iii. Not only does it play the major part in allowing us to feed the world's population, but it also plays a major role in the recycling of air, water, nutrients, and maintaining a number of natural cycles, thereby ensuring that there will be a basis for life in generations to come.
 - iv. Soils provide a direct source of minerals and other resources. The most significant raw materials are sand, gravel, stone, ore, coal and peat. Sand, gravel, stone are the raw materials of building, ore is the raw material of industry, coal and peat are the raw materials of heating. Soils can cover or be built up on many of these raw materials.
 - v. Soil is the vital thing for animals, vegetations and all living creatures. Soil is formed slowly, however, it can be easily demolished. For these reasons, we must protect it well.