

# Resources and Development

## Objective Section \_\_\_\_\_ (1 mark each)

Q. 1. Read the following features of a soil and name the related soil :

[CBSE OD, Set 1, 2020]

- (a) Develops in high rainfall area
- (b) Intense leaching process takes place.
- (c) Humus content is low.

Ans. Laterite soil.

Q. 2. Read the features of a soil given below and name the related soil.

[CBSE OD, Set 2, 2020]

- (i) It consists of properties of sand, silt and clay.
- (ii) It is described on the basis of age.
- (iii) It is very fertile.

Ans. Alluvial soil.

Q. 3. Read the features of a soil given below and name the related soil.

[CBSE OD, Set 3, 2020]

(i) This soil range from red to brown in colour.

(ii) Generally sandy in Texture and saline.

(iii) Soil lacks humus and moisture.

Ans. Arid soil.

Q. 4. Fill in the blanks.

[CBSE Delhi, Set 1, 2020]

Types of Resources	Examples
A ?	Biotic and Abiotic Renewable and non-renewable
B ?	

Ans. (A) On the basis of origin (B) On the basis of exhaustibility.

## Very Short Answer Type Questions \_\_\_\_\_ (1 mark each)

Q. 1. How is over irrigation responsible for land degradation in Punjab?

OR

How is cement industry responsible for land degradation?

[CBSE Delhi, Set 1, 2019]

Ans. Over irrigation is responsible for land degradation due to water logging which leads to increase in salinity and alkalinity in the soil.

OR

Mineral processing like grinding of limestone for cement industry generates heavy amount of dust which is released in the atmosphere. Later, it settles down in the surrounding areas which slows the process of infiltration of water into the soil. This is how land gets degraded due to cement industries.

Q. 2. Classify resources on the basis of origin.  
[CBSE, 2018]

Ans. Resources classification on the basis of origin:

(i) **Biotic resources:** All living organisms in our environment are known as biotic resources. Example: Tree, animal, insects etc.

(ii) **Abiotic resources:** All non-living things present in our environment are known as abiotic resources. Example: earth, air, water, metals, rocks etc.

Q. 3. Give any two examples of non-renewable resources.

[CBSE, Term 1, 2015]

Ans. Coal and minerals are the two examples of non-renewable resources.

Q. 4. Which factor is mainly responsible for maximum land degradation in India?

[CBSE, Term 1, 2015]

Ans. Over-grazing is one of the main reason for land degradation. States, where over-grazing has resulted in land degradation are, Gujarat, Rajasthan, Madhya Pradesh and Maharashtra.



## Short Answer Type Questions-II \_\_\_\_\_ (3 marks each)

**Q. 1. Describe the importance of judicious use of resources.**

**OR**

**Describe the different steps of 'resource planning.'** [CBSE Delhi, Set 1, 2020]

**Ans.** The importance of judicious use of resources are given below :

- (i) Resource planning : The planning is an important step in country like India where resources are enormously diverse for judicious use of resources. It provides economically viable and sustainable solution to the issues related to resources and serves efficiently and effectively.
- (ii) Management resources : The proper management is vital for the efficient and sustainable use of resources. The proper management of resources successfully links the human and resources resulting in its judicious use.
- (iii) Awareness : The awareness plays an important role in planning, management and use of resources. It is the responsibility of an individual to affectionately plan and manage their local resources and should manage and harness them in the sustainable and best possible way like a vacant piece of community land that can be brought under use by building parks, garden, etc.

**OR**

Resource planning is consisting of complex processes which are given below :

- (i) Identification and inventory of resources across the regions of the country. This involves surveying mapping, qualitative and quantitative estimation and measurement of the resources.
- (ii) Evolving a planning structure endowed with appropriate technology, skill and institutional set up for implementing resource development plans.

- (iii) Matching the resource development plans with overall national development plans.

**Q. 2. Describe any three main features of 'Alluvial soil' found in India.**

**OR**

**Describe any three main features of 'Black soil' found in India.**

[CBSE OD, Set 1, 2019]

- Ans.** Major characteristics of Alluvial Soil are:
- (i) Alluvial soil is considered as one of the most fertile soils amongst all soil types. Alluvial soil covers the entire northern plains in India.
  - (ii) Alluvial soil contains sand, silt and clay mainly due to silt deposited by the Indo-Gangetic-Brahmaputra rivers. According to age, it is classified into Bhangar (old alluvial) and Khadar (new alluvial).
  - (iii) Alluvial soil contains an ample amount of potash, phosphoric acid and lime. This soil is ideal for the growth of crops like sugarcane, wheat and rice etc.

**OR**

Major characteristics of Black soil are:

- (i) Black soil is fine textured and clayey in nature. It is suitable for growing cotton.
- (ii) Black soil has high amount of lime, iron, magnesium and generally low quantities of Phosphorus, Nitrogen and organic matter.
- (iii) It is formed from weathered lava rocks, thus is black in colour and also known as Regur Soil.
- (iv) It has a high clay content and therefore is highly retentive of water. It is extremely fertile in most of the places where it is found.

**Q. 3. How is the issue of sustainability important for development? Explain with examples.** [CBSE, 2018]



Introduction : Sustainable development means the development that takes place without damaging the environment or compromising the ability of the future generations to meet their own needs.

(a) The resources are not free gifts of nature. Their exploitation will lead to their depletion and thus halt on development. e.g:- resources like Petroleum are exhaustible resource, their reckless exploitation will lead to their deficiency.

(b) Resources are vital for development. Industries, agriculture, etc all depend on resources. Economic development depends on resource availability.

(c) Millions of people earn their livelihood and sustain on resources. Resources like minerals, coal are pre-requisite for development. Water, food, etc are necessary for survival. To protect future generations.

Conclusion : Hence, we need to use the resources judiciously to sustain development.

Ans. (i) Sustainable use of natural resources is the process by which economic, industrial and social needs are met but the resources are to be managed and exploited in such a way that the biodiversity, balance in the ecosystem, and the biological cycle like carbon, nitrogen and water cycle are not destroyed.

(ii) Coal, oil and natural gas are chiefly used to provide electricity and to power vehicles. We should take advantage of the abundance of solar, wind, wave, tidal and thermal energy that is free, renewable and sustainable. These resources will provide more than enough green electricity which can then power all the industries, homes and transport that we need.

(iii) Sustainability lays emphasis on environmental protection and check environmental degradation, moreover, to stop over exploitation and over use of resources.

**Q. 4. Why has the land under forests not increased much from 1960-61?**

[CBSE, Term 1, 2016]

Ans. (i) Land resources in India are primarily divide into agricultural land, forest land, land meant for pasture and grazing land for other non-agricultural use and waste land. Waste land includes rocky, arid and desert areas. Land is also used for other non-agricultural purpose such as housing, roads and industry. According to the data for 2002-03, about 54% of the total land area is cultivable or follow, 22.5% is covered

by forests and 3.5% is used for grazing. The rest is waste land, with traces of miscellaneous cultivation. The improper use of forest land has degraded the available land area and has made conservation of forests difficult. Human activities such as deforestation, mining and quarrying have contributed to the slow growth rate of forests. Thus, land under forest has increased by only about 4% since 1960–61.

- (ii) (a) Technological development has led to industrialization which has increased the use of natural resources. (b) Technological development has converted the subsistence agriculture to commercial agriculture and this has led to the over utilization of soil. (c) The development of technology contributed to increased production of quality goods and provision of better services to the people. (d) Technological development has also improved the process of mining. (e) Economic development has led to increasing urbanization and modernization which demands more resources.

**Q. 5. How is the mining activity injurious to the health of the miners and environment? Explain.**

[CBSE Delhi, Term 2, Set 1, 2015]

**Ans.** Mining affects the environment by exposing radioactive elements, removing topsoil, increasing the risk of contamination of the nearby ground and surface water sources, and acidification of the surrounding environment. Mining affects and disrupts the aquatic habitats, terrestrial habitats and wetlands that contains diverse ecosystems and organisms that rely on these areas for survival. A mine's large consumption and release of water, manipulation of topography and landscape, as well as the release of particulates and chemicals affects various habitats directly and indirectly.

Mining is dependent on the fossil fuels, which are non-renewable, to generate the energy needed for its operations. Dust released during the break up of materials causes lung problems and poses health risks for miners and people that live in the surrounding areas.



## Long Answer Type Questions \_\_\_\_\_ (5 marks each)

**Q. 1. What is meant by 'resources'? Mention the four basis to classify the resources.**

[CBSE, Term 1, 2015]

**Ans.** Everything available in our environment which can be used to satisfy our needs is called a Resource. Resources are technological accessible, economically feasible and culturally acceptable. Examples are coal, minerals, forest, land, water, fossil fuels etc.

Resources are classified as follows:

- (i) On the basis of origin
  - (a) Biotic: living resources like plants etc.
  - (b) Abiotic: Non living resources like solar energy, land etc.
- (ii) On the basis of exhaustibility
  - (a) Renewable: Which can be recreated like solar energy etc.
  - (b) Non Renewable: Which cannot be recreate like fossil fuels.

(iii) On the basis of ownership

- (a) Individual (Personal): Owned by an individual person.
- (b) Community: Owned by the whole community.
- (c) National: Owned by a country.
- (d) International: Accessed by all nations.

(iv) On the basis of status of development.

- (a) Potential: Resources which are found in a region, but have not been utilized.
- (b) Developed: Which are surveyed and quality and quantity shows the utilization.
- (c) Reserve: Which can be used for meeting future requirements.
- (d) Stock: Which can not be used due to the lack of appropriate technology to used these resources.