

# **Chapter-1**

## **Resources and Development**

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### **1 marks Questions**

**1. Who wrote the book 'Small is Beautiful'?**

**Ans.** Schumacher

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**2. Which type of soil is found in the river deltas of the Eastern Coast?**

**Ans.** Alluvial Soil

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**3. Write the two types of renewable resources.**

**Ans.** Continuous and Biological resources

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**4. From which Five Year Plan has India made concerted efforts for achieving the goals of resource planning?**

**Ans.** First Five Year Plan

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**5. Give any two factors which determine the land use pattern of a nation.**

**Ans.** . Topography and Population

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**6. How much degraded land is present in India?**

**Ans.** 130 million hectare

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**7. By which name is the bad land known in Chambal basin?**

**Ans.** Ravines

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**8. Name the institution which is empowered by the government of India to acquire land?**

**Ans.** Urban Development Authorities

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**9. What is strip cropping?**

**Ans.** . Large fields divided into strips. Strips of grass are left to grow between the crops. This breaks up the force of the wind. This method is known as strip cropping.

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**10. Name the way which helps the sand dune to stabilization.**

**Ans.** Shelter Belts have contributed significantly to the establishment of sand dunes.

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**11. Name the areas where terrace farming is practiced in India?**

**Ans.** Western and central Himalayas of India

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**12. Why are the lower horizons of the soil occupied by Kankar?**

**Ans.** Because of the increasing calcium contents downwards

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**13. Name the soil which is suitable for the cropping of cashew nuts.**

**Ans.** . Red Laterite Soil

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**14. Name the nutrient in which black soils is poor?**

**Ans.** Phosphoric contents

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**15. Name any two nutrients which are found in black soils?**

**Ans.** Calcium carbonate and magnesium

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**16. Mention the reason due to which red soils looks red?**

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**Ans.** These soils develop a reddish colour due to diffusion of iron in crystalline and metamorphic rocks.

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**17. Name the soils which are well known for their capacity to hold moisture.**

**Ans.** . Black soils

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**18. Which region of India is known as Basalt region?**

**Ans.** The Deccan trap region spread over northwest Deccan plateau.

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**19. In which state overgrazing is the main reason of land degradation in India?**

**Ans.** Gujarat

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**20. Where was first international earth summit held?**

**Ans.** . Rio de Janeiro in Brazil

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**21. Coal, iron ore, petroleum, diesel etc. are the examples of**

- a) Biotic resources b) Abiotic resources**  
**c) Renewable resources d) Non Renewable resources**

**Ans.** d) Non Renewable resources

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**22. Which one of the following term is used to identify the old and new alluvial respectively ?**

- a) Khadas & Tarai b) Tarai & Bangar**  
**c) Bangar & Khadar d) Tarai & Dvars**

**Ans.** c) Bangar & Khadar

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**23. Which one of the following soil is the best for cotton cultivation ?**

- a) Red soil b) Black soil**

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**c) Laterite soil d) Alluvial soil**

**Ans. b) Black soil**

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**24. How much percentage of forest area in the country according to the National Forest Policy.**

**a) 33% b) 37%**

**c) 27% d) 31%**

**Ans. a) 33%**

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**25. Which type of soil develops due to high temperature and evaporation ?**

**a) Arid Soil b) Forest Soil**

**c) Black Soil d) Red Soil**

**Ans. a) Arid Soil**

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**26. Which one of the following resources can be acquired by the Nation ?**

**a) Potential resources b) International resources**

**c) National resources d) Public resources**

**Ans. c) National resources**

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**27. Which one of the following is responsible for sheet erosion ?**

**a) Underground water b) Wind**

**c) Glacier d) Water**

**Ans. d) Water**

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**28. Which one of the following method is used to break up the force of wind?**

**a) Shelter belt b) Strip Cropping**

**c) Contour ploughing d) Terrace farming**

**Ans. a) Shelter belt**

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**29. Which one of the following is the main cause of land degradation in Madhya Pradesh ?**

- a) Mining b) Overgrazing**  
**c) Deforestation d) Over Irrigation**

**Ans. c) Deforestation**

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**30. Which one of the following statements refers to the sustainable development ?**

- a) Overall development of various resources**  
**b) Development should take place without damaging the environment.**  
**c) Economic development of people.**  
**d) Development that meets the desires of the members of all communities.**

**Ans. b) Development should take place without damaging the environment.**

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**31. What steps can be taken to control soil erosion in hilly areas ?**

- Ans. 1) Terracing on hilly area**  
**2) Buildings Dams on hilly areas**  
**3) Afforestation**
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**32. When and why was the Rio-de-Janero Earth summit held ?**

**Ans. 1992 Rio-de-Janero (Brazil)**

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**33. Write two characteristics each of Khadar and Bangar ?**

**Ans. Khadar (New Alluvium)**

- 1) New Alluvium a new soil**  
**2) Very fertile soil less Kankar nodules**

**Bangar (Old Alluvium)**

- 1) Old Alluvium or Old soil**  
**2) Not to fertile, often contains Kankar nodules**
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**34. What type of soil is found in river deltas of the eastern coast ? Give three main features of this type of soil.**

**Ans.** Alluvial Soil

- 1) Most important soil
- 2) Such a soil is the result of deposits of river.
- 3) Very fertile soil.

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**35. What do you, mean by land use pattern ? Name the factors that determine the use of land.**

**Ans.** Utilization of land for various purposes such as cultivation grazing of animals mining construction of roads etc.

Factors

- 1) Topography
- 2) Climate
- 3) Human Factor
- 4) Accessibility

### 3 marks Questions

**1. What was the main contribution of the Brundtland Commission Report, 1987?**

**Ans.** a. The seminal contribution with respect to resource conservation at the global level was made by the Brundtland Commission Report, 1987.

b. This report introduced the concept of 'Sustainable Development' and advocated it as a means for resource conservation, which was substantially published in a book, entitled Our Common Future.

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**2. Define resources? Name some resources?**

**Ans.** a. 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.

b. Land, Soil, Tree and air are some examples of resources.

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**3. Explain the interdependent relationship between nature, technology and institutions.**

**Ans.** a. The process of transformation of things available in our environment involves an interdependent relationship between nature, technology and institutions.

b. Human beings interact with nature through technology and create institutions to accelerate their economic development.

c. Resources are the functions of activities.

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**4. "Resources are a function of human activities". Elaborate the statement with suitable arguments.**

**Ans.** a. Natural resources are the free gifts of nature but many manmade resources are used by the humanity.

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b. Resources are functions of human activities. Human beings themselves are essential components of resources.

c. They transform material available in our environment into resources and use them.

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**5. Classify resources on the basis of origin. Give examples.**

**Ans.** a. Biotic resources: These are obtained from biosphere and have life such as human beings, flora and fauna, fisheries, livestock etc.

b. Abiotic resources: All those things which are composed of non-living things are called abiotic resources. For example, rocks and metals.

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**6. Classify resources on the basis of exhaustibility. Write examples.**

**Ans.** a. Renewable resources: The resources which can be renewed or reproduced by physical, chemical or mechanical processes are known as renewable resources: For example, solar and wind energy, water, forests and wildlife, etc.

b. Non Renewable resources: These occur over a very long geological time. Minerals and fossil fuels are examples of such resources. 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.

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**7. List the problems caused due to the indiscriminate use of resources by human being?**

**Ans.** a. Depletion of resources for satisfying the greed of few individuals.

b. Accumulation of resources in few hands, which, in turn, divide the society into two, segments i.e. 'haves' and 'have nots' or rich and poor.

c. Indiscriminate exploitation of resources has led to global ecological crises such as, global warming, ozone layer depletion, environmental pollution and land degradation.

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**8. What was agenda 21?**

**Ans.** a. It is the declaration signed by world leaders in 1992 at the United Nations conference on Environment and Development (UNCED).

b. It focuses on attaining Global Sustainable Development.

c. Its main aim is to fight the environmental damage, poverty, diseases through global cooperation on common interest, mutual needs and shared responsibilities.



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d. An important and distinct aim of the agenda is that every local government should draw its own local Agenda 21.

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**9. Write a short note on Rio de Janeiro Earth Summit, 1992.**

- Ans.** a. Rio de Janeiro was the meeting ground for the first International Earth Summit.  
b. More than 100 heads of state met at this famous conference which was convened in June 1992 to address the urgent problems of environmental protection and socio-economic development at the global level.  
c. A declaration on Global Climatic change and the Biological Diversity was signed by the assembled leaders.  
d. They adopted Agenda 21 and endorsed the global forest Principles to achieve Sustainable Development in the 21st century.
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**10. What is resource planning? Why is resource planning essential?**

- Ans.** a. Resource planning: Resource planning is the widely accepted strategy for judicious use of resources.  
b. Resource planning is essential for sustainable existence of all forms of life.  
c. Sustainable existence is a component of sustainable development.
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**11. Define sustainable development? What are their importances?**

- Ans.** a. Sustainable Development: Sustainable development means development should take place without damaging the environment, and development in the present should not compromise with the needs of the future generations.  
b. It is essential for sustained quality of life.  
c. If the present trend of resource depletion by a few individuals and countries continues, the future of our planet is in danger. So sustainable development is very important to save our planet and our self.
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**12. Explain the three steps that involved in the complex process of resource planning?**

- Ans.** a. Identification and inventory of resources across the regions of the country. This involves surveying, mapping and qualitative and quantitative estimation and measurement of the resources.

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b. Evolving a planning structure endowed with appropriate technology, skill and institutional set up for implementing resource development plans.

Matching the resource development plans with overall national development plans

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**13. How far it is correct to say that the availability of resources is a necessary condition for the development of any region? Explain.**

**Ans.** The availability of resources is a necessary condition for the development of any region, but mere availability of resources in the absence of corresponding changes in technology and institutions may hinder development. There are many regions in our country that are rich in resources but these are included in economically backward regions. On the contrary there are some regions which have a poor resource base but they are economically developed.

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**14. Explain the relationship between the process of colonization and rich resources of colonies.**

**Ans.** a. The History of colonization reveals that rich resources in colonies were the main attractions of the foreign traders.

b. It was primarily the higher level of technological development of colonizing countries that helped them to exploit resources of other regions and established their supremacy over colonies.

c. There for resources can contribute to development only when they are accompanied by appropriate technological development and institutional changes.

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**15. What are the different factors that determine land use?**

**Ans.** a. Both physical and human factors determine the land use pattern of any area.

b. Physical factors include topography, climate, and soil types.

c. Human factors include population density, technological capability and cultural traditions.

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**16. What type of relief covers most of India's land? Explain.**

**Ans.** a. India has land under a variety of relief features, namely: mountains, plateaus, plains and islands.

b. About 43 per cent of land area is plain, which provides facilities for agriculture and

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industry.

c. Mountains account for 30 per cent of the total surface area of the country and ensure perennial flow of rivers, provides facilities of tourism and ecological aspects.

D. About 27 per cent of the area of the country is plateau region. It possesses rich reserves of minerals, fossil fuels and forests.

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**17. What is the reason behind the availability of Land use data for only 93 percent of the total geography area of India?**

**Ans.** a. Total geographical area of India is 3.28 million sq km land use data, however is available only for 93 per cent of the total geographical area.

b. Because the land use reporting for most of the nor-east states except Assam has not been done fully.

c. Moreover, some areas of Jammu and Kashmir occupied by Pakistan and China have also not been surveyed.

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**18. Why does the net sown area vary from one state to another?**

**Ans.** a. There are wide variations in the pattern of net sown area from one state to another state.

b. If we compare Haryana and Punjab with Arunachal Pradesh, Mizoram, Manipur and Andaman and Nicobar Islands there is a great disparity.

c. In Punjab and Haryana the net sown area is 80% of the total area but in other mentioned states it is less than 10% of the total area.

d. The reasons for this differences are many, e.g., climate, soil, relief, irrigation facilities.

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**19. Distinguish between Khadar and Bhangar.**

**Ans.** Khadar Bhangar

1. The khadar soils are found in the low areas of valley. 1. The Bhangar soils are found in the higher reaches.

2. These soils are finer in texture. 2. These are coarser in texture.

3. These soils are more fertile. 3. These soils are less fertile.

4. These soils are known as New alluvial. 4. These soils are known as old alluvial.

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**20. How is land a natural resource of utmost importance? Explain with suitable arguments.**

- Ans.** a. All economic activities are performed on land.  
b. It supports natural vegetation and wildlife.  
c. It is used for transportation and communication system.  
d. Most of the minerals are formed in land.
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**21. What is soil erosion? Explain the major types of soil erosion?**

- Ans.** a. Soil Erosion: Soil erosion is the removal of soil by the forces of nature like wind and water is called soil erosion. This can also be described as denudation of soil cover and subsequent washing down. Following are its two types:  
b. Wind Erosion: Wind blows loose soil off flat or slopping land. This is known as wind erosion.  
c. Water Erosion: When running water is responsible for the removal of the top most layer of the earth that is known as water erosion.
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**22. Explain the two types of water erosion.**

- Ans.** a. Sheet Erosion: When the top layer of the soil is removed over a large area by the running water is called as sheet erosion. In such cases the top soil is washed away.  
b. Gully erosion: 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.
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**23. Which type of soil is found in the river deltas of the eastern coast? Give three main features of this type of soil.**

- Ans.** Alluvial soil is found in the river deltas of the eastern coast.  
a. The alluvial soil consists of various proportions of sand, silt and clay.  
b. According to their age alluvial soil can be classified as old alluvial and new alluvial to well connected developers.  
c. Due to its high fertility, region of alluvial soils are intensively cultivated and densely populated.
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**24. How far it is correct to say that it is possible to reverse land degradation? Explain the statement while giving the example of village Sukhomajri?**

**Ans.** a. The village of Sukhomajti and the district of Jhabua have shown that it is possible to reverse land degradation. Tree density in Sukhomajari increased from 13 percent hectare in 17976 to 1,272 per hectare in 1992.

b. Regeneration of the environment leads to economic well being as a result of greater resource availability improved agriculture and animal care, and consequently, increased incomes. Average annual household income in Sukhomajri ranged from 10000-15000 between 1979 and 1984.

c. People's management is essential for ecological restoration. With people being made the decision-makers by Madhya Pradesh government, 2.9 million hectares or about 1 per cent of India's land area, are being greened across the state through watershed management.

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**25. Elucidate the views of Gandhiji regarding the conservation of resources.**

**Ans.** a. Gandhiji was very apt in voicing his concern about resource conservation.

b. He said, "There is enough for everybody's need and not for anybody's greed.

c. He placed the greedy and selfish individuals and exploitative nature of modern technology as the root cause for resource depletion at the global level.

D. He was against mass production and wanted to replace it with the production by the masses.

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**26. Why is resource planning essential?**

**Ans.** a. As the resources are limited, so their planning is quite necessary so that we can use them properly and at the same time save them for our coming generations.

b. For the balanced development of the country, the planning of the resources becomes very essential.

c. A resource planning is also necessary to save their exploitation or unlawful exploitation by the unscrupulous elements of the society.

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**27. Explain any three human activities which are mainly responsible for land degradation in India.**

**Ans.** a. Some human activities such as deforestation, overgrazing, mining and quarrying too have contributed significantly in land degradation.

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- b. Mining sites are abandoned after excavation work is complete leaving deep scars and traces of over-burdening.
  - c. Deforestation due to mining has caused severe land degradation.
  - D. Over irrigation is responsible for land degradation due to water logging leading to increase in salinity and alkalinity in the soil.
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**28. Suggest some ways to solve the problems of land degradation.**

- Ans.** a. Afforestation and proper management of grazing can help to some extent to solve the problem of land degradation.
- b. Planting of shelter belts of plants, control on over grazing, stabilization of sand dunes by growing thorny bushes is some of the methods to check land degradation.
- c. Proper management of waste lands, control of mining activities, proper discharge and disposal of industrial effluents and wastes after treatment can reduce land and water degradation in industrial and suburban areas.
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**29. How do rocks plays an important role in the formation of soil?**

- Ans.** a. Parent rock and bed rock are main factors in the formation of soil.
- b. Climatic conditions with the parent rock material are the important factors for the formation of black soil. The Deccan trap region is made up of lava flows.
- c. Red soil develops on crystalline igneous rocks in areas of low rainfall.
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**30. What is meant by two types of natural resources? Give one example of each.**

- Ans.** a. All gifts of nature which are useful in making the life of human beings comfortable and worth living are known as natural resources.
- b. Their two main types are biotic and abiotic resources.
- c. Forests and animals are biotic resources while land water and soil are abiotic natural resources.
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**31. Long Answer type questions**

**Classify resources on the basis of ownership into four categories. Mention the main feature of each.**

- Ans.** (1) Individual resources: Owned privately by individual. Example houses pasture etc.

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(2) Community Owned resources : accessible to all the members of the Community.

Example : Play ground park etc.

(3) National resources : within the political boundaries of the country.

Example : Minerals, forests etc.

(4) International resources : The oceanic resources beyond 200 Km. of the Exclusive Economic Zone belong to international institutions.

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**32. What is resource planning ? Write any three utility of resources.**

**Ans.** Resource Planning : Resource Planning is a technique of skill of proper utilization of resources.

1. They are beneficial to human being
  2. Different types of things are made by them.
  3. Resources are limited. Do not waste the great gifts of the nature.
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**33. Distinguish between the Renewable and Non- Renewable Resources.**

**Ans. Renewable Resources**

- 1) These Resources are those which once mined and used can be regenerated.
- 2) These Resources which may be obtained continuously.

Example : Land, water plants etc.

**Non Renewable Resources.**

- 1) These Resources are those which once mined and used cannot be regenerated.
- 2) All mineral Resources are limited.

Example : Coal, Mineral-oil etc.

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**34. Describe briefly the distribution of soils found in India.**

**Ans.** (1) Alluvial Soil

(2) Black Soil

(3) Red and Yellow Soil

(4) Laterite Soil

(5) Mountain Soil

(6) Desert Soil (Explain it)

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**35. What is regur soil ? Write its two features. Mention any two regions where regur soil is found.**

**Ans.** Regur soil – Black Soil Features

- 1) made up extremely fine
- 2) have good capacity to hold moisture.
- 3) develop deep cracks during hot weather.
- 4) rich in calcium carbonate, potash and lime Regions

- 1) Maharashtra – Malva Plateau
- 2) Madhya Pradesh and Chhatisgarh Plateau



## 5 marks Questions

### 1. Classify resources on the basis of ownership with example.

**Ans.** a. Individual resources: These are owned privately by individuals. Many farmers own land which allotted to them by government against the payment of revenue. People own plots, houses and other property.

b. Community owned Resources: There are resources which are accessible to all the members of the community. Village commons, public parks, burial ground, playgrounds in urban areas are de facto accessible to all the people living there.

c. National resources: All the resources belong to the nation. The country has legal power to acquire even private property for public good. We have seen roads, canals, railways being constructed on fields owned by some individuals. Urban Development Authorities get empowered by the government to acquire land.

d. International Resources: There are international institutions which regulate some resources. The oceanic resources beyond 200 km of the exclusive Economic Zone belong to open ocean and no individual country can utilize these without the concurrence of international institutions.

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### 2. Classify resources on the basis of state of development with example.

**Ans.** a. Potential Resources: Resources which are found in a region, but have not been utilized due to the lack of capital. For example, the western parts of India particularly Rajasthan and Gujarat have enormous potential for the development of wind and solar energy, but so far these have not been developed properly.

b. Developed resources: Resources which are surveyed and their quality and quantity have been determined for utilization. The development of resources depends on technology and level of their feasibility.

c. Stock: material in the environment which have the potential to satisfy human needs but

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human being do not have the appropriate technology to access these, are included among stock. For example water is a compound of two inflammable gases: Hydrogen and oxygen, which can be used as a rich source of energy. But we do not have the required technology to use them for this purpose. Hence it can be considered as stock.

d. Reserves: Reserves are the subset of stock, which can be put into use with the help of existing technology but their use has not been started. These can be used for meeting future requirements.

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### **3. Why is resource planning important in the context of a country like India?**

**Ans.** a. India has enormous diversity in the availability of resources.

b. There are regions which are rich in certain types of resources but are deficient in some other resources.

c. There are some regions which can be considered self sufficient in terms of availability of resources and there are some regions which have acute shortage of some vital resources.

d. For example the states of Jharkhand, Chhattisgarh and Madhya Pradesh are rich in Minerals and coal deposits. Arunachal Pradesh abundance of water resources but lack of infrastructural development.

e. The state of Rajasthan is very well endowed with solar and wind energy but lacks in water resources.

f. The cold desert of Ladakh is entirely isolated from the rest of the country.

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### **4. How has technical and economic development led to more consumption of resources?**

**Ans.** a. Human beings interacted with nature through technological and create institutions to accelerate their economic development.

b. As more technological development occurs there is increased need for inputs and utilization of resources.

c. Technical and technological development is closely linked to economic development.

d. For example more factories providing employment to more people are a necessity. For the factory land and labour is used. For this mining of minerals and metals increases.

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### **5. Explain the land use pattern in India?**

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- Ans.** a. The net sown area in India has decreased from 45.26% to 43.41%. This means that more and more agricultural land is being shifted to other activities.
- b. The pattern of the net sown area varies gently from one state to another. In Punjab and Haryana the net sown area is 80% of the total area but Arunachal Pradesh, Mizoram, Manipur and Andaman and Nicobar Islands, it is less than 10% of the total area.
- c. The area under forests has been increased from 18.11% in 1960-61 to 22.57% in 2000-2003 and to 23% in 2005-06 yet it is far below than the scientific norms.
- d. The land under permanent pastures is very low, i.e., only 3.45%.
- e. Area under fallow land has also decreased which shows, that subsistence agriculture is being replaced by commercial agriculture.
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**6. Explain any five proper farming techniques which can be used for soil conservation.**

- Ans.** a. Strip Cropping: To counter the effect of wind the practice of strip cropping is followed to stop wind erosion. Large fields are divided in strips. Grass in strips is left to grow between the crops.
- b. Contour Ploughing: Ploughing along the contour lines does not let water run down the slopes. This technique involved ploughing along contours, so that the furrows follow lines linking points of the same height. Such furrows halt the downward flow of water and reduce erosion.
- c. Terrace Farming: Since ancient times farmers have built terraces or steps up a hillside creating several levels of farms. Hill slopes are cut into a number of terraces having horizontal top and steep slopes on the back and front.
- d. Crop rotation: If the same crop is sown in the same field, year after year, this consumes particular nutrients from the soil making it infertile. Crop rotation can check the type of erosion.
- e. Shelter Belts: Planting trees to create shelter also works in a similar way. Rows of such trees are called shelter belts. These shelter belts have contributed significantly to the stabilization of sand dunes and in establishing the desert in western India.
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**7. How is red soil formed? Mention its features.**

- Ans.** a. Formation: most of the red soils have come into existence due to weathering of

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ancient crystalline igneous rocks.

- b. Soils are loamy in deep depressions and in upland. They consist of loose gravels and highly coarse materials.
  - c. These soils develop a reddish colour due to diffusion of iron in crystalline and metamorphic rocks.
  - d. It looks yellow when it occurs in a hydrated form.
  - e. This soil is found in the areas of low rainfall in the eastern and southern parts of the Deccan plateau.
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**8. Which is most widely spread and important soil of India? State the characteristics of this type of soil?**

**Ans.** Alluvial soil is most widely spread and important soil of India. In fact the entire northern plains are made of alluvial soils.

- a. These soils have been deposited by three important Himalayan river systems-the Indus, the Ganga and the Brahmaputra.
  - b. The alluvial soil consists of various proportions of sand, silt and clay.
  - c. According to their age alluvial soil can be classified as old alluvial and new alluvial.
  - d. Alluvial soils as a whole are very fertile. Mostly these soils contain adequate proportion of potash, phosphoric acid and lime which are ideal for the growth of sugarcane, paddy, wheat and other cereal and pulse crops.
  - e. Due to its high fertility, region of alluvial soils are intensively cultivated and densely populated.
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**9. Which type of soil is ideal for growth of cotton? What are the main characteristics of this type of soil? Name some areas where they found.**

**Ans.** Black soil is ideal for the growth of cotton soil. Following are its characteristics:

- a. Black soils are also known as 'regur' soil or black cotton soils.
- b. Such a soil is ideal for growing cotton and hence the name.
- c. They have extremely good moisture retention capacity but become sticky when wet.
- d. These soils are difficult work upon unless tilled during pre-monsoon periods or just after the first shower.
- e. Black soils are rich in soil nutrients such as calcium carbonate, magnesium, potash and

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lime but poor in phosphoric contents.

f. This soil is found in Deccan trap areas. This includes Maharashtra, Western Madhya Pradesh, Gujarat, and Chhattisgarh, some parts of Karnataka, Andhra Pradesh and Tamil Nadu.

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**10. What is soil? Analyze the four main factors which help in the formation of soil.**

**Ans.** Soil: 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. The soil is a living system. It takes million of years to form soil up to a few cm in depth.

- a. Relief, parent rock or bed rock, climate, vegetation and other forms of life and time are important factors in the formation of soil.
- b. Various forces of nature such as change in temperature, actions of running water, wind and glaciers, activities of decomposition etc, contribute to the formation of soil.
- c. Chemical and organic changes which take place in the soil are equally important.
- d. Soils also consist of organic (humus) or inorganic materials.

## **Multiple Choice Questions**

**1. Coal, iron ore, petroleum, diesel etc. are the examples of**

- a) Biotic resources b) Abiotic resources**  
**c) Renewable resources d) Non Renewable resources**

**Ans.d) Non Renewable resources**

**2. Which one of the following term is used to identify the old and new alluvial respectively ?**

- a) Khadas & Tarai b) Tarai & Bangar**  
**c) Bangar & Khadar d) Tarai & Dvars**

**Ans.c) Bangar & Khadar**

**3. Which one of the following soil is the best for cotton cultivation ?**

- a) Red soil b) Black soil**  
**c) Laterite soil d) Alluvial soil**

**Ans.b) Black soil**

**4. How much percentage of forest area in the country according to the National Forest Policy.**

- a) 33% b) 37%**  
**c) 27% d) 31%**

**Ans.a) 33%**

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**5. Which type of soil develops due to high temperature and evaporation ?**

- a) Arid Soil b) Forest Soil**
- c) Black Soil d) Red Soil**

**Ans.a) Arid Soil**

**6. Which one of the following resources can be acquired by the Nation ?**

- a) Potential resources b) International resources**
- c) National resources d) Public resources**

**Ans.c) National resources**

**7. Which one of the following is responsible for sheet erosion ?**

- a) Underground water b) Wind**
- c) Glacier d) Water**

**Ans.d) Water**

**8. Which one of the following method is used to break up the force of wind?**

- a) Shelter belt b) Strip Cropping**
- c) Contour ploughing d) Terrace farming**

**Ans.a) Shelter belt**

**9 Which one of the following is the main cause of land degradation in Madhya Pradesh ?**

- a) Mining b) Overgrazing**
- c) Deforestation d) Over Irrigation**

**Ans.c) Deforestation**

**10. Which one of the following statements refers to the sustainable development ?**

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**a) Overall development of various resources**

**b) Development should take place without damaging the environment.**

**c) Economic development of people.**

**d) Development that meets the desires of the members of all communities.**

**Ans.b)** Development should take place without damaging the environment.

**Short Answer Type Questions :**

**Q1. What steps can be taken to control soil erosion in hilly areas ?**

**Ans.** 1) Terracing on hilly area

2) Building Dams on hilly areas

3) Afforestation

**Q2. When and why was the Rio-de-Janero Earth summit held ?**

**Ans.** 1992 Rio-de-Janero (Brazil)

Earth summit To achieve sustainable development in order to combat environment damage, poverty and disease, it laid emphasis on global cooperation mutual needs and shared responsibilities.

**Q3. Write two characteristics each of Khadar and Bangar ?**

**Ans.** Khadar (New Alluvium)

1) New Alluvium a new soil

2) Very fertile soil less Kankar nodules

Bangar (Old Alluvium)

1) Old Alluvium or Old soil

2) Not to fertile, often contains Kankar nodules



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**Q4. What type of soil is found in river deltas of the eastern coast ? Give three main features of this type of soil.**

**Ans.** Alluvial Soil

- 1) Most important soil
- 2) Such a soil is the result of deposits of river.
- 3) Very fertile soil.

**Q5. What do you, mean by land use pattern ? Name the factors that determine the use of land.**

**Ans.** Utilization of land for various purposes such as cultivation grazing of animals mining construction of roads etc.

Factors

- 1) Topography
- 2) Climate
- 3) Human Factor
- 4) Accessibility

**Q6. Long Answer type questions**

**1. Classify resources on the basis of ownership into four categories. Mention the main feature of each.**

**Ans.** (1) Individual resources: Owned privately by individual. Example houses pasture etc.

(2) Community Owned resources : accessible to all the members of the Community. Example : Play ground park etc.

(3) National resources : within the political boundaries of the country.

Example : Minerals, forests etc.

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(4) International resources : The oceanic resources beyond 200 Km. of the Exclusive Economic Zone belong to international institutions.

**Q2. What is resource planning ? Write any three utility of resources.**

**Ans.** Resource Planning : Resource Planning is a technique of skill of proper utilization of resources.

1. They are beneficial to human being
2. Different types of things are made by them.
3. Resources are limited. Do not waste the great gifts of the nature.

**Q3. Distinguish between the Renewable and Non- Renewable Resources.**

**Ans.** Renewable Resources

- 1) These Resources are those which once mined and used can be regenerated.
- 2) These Resources which may be obtained continuously.

Example : Land, water plants etc.

Non Renewable Resources.

- 1) These Resources are those which once mined and used cannot be regenerated.
- 2) All mineral Resources are limited.

Example : Coal, Mineral-oil etc.

**Q4. Describe briefly the distribution of soils found in India.**

**Ans.** (1) Alluvial Soil (2) Black Soil

(3) Red and Yellow Soil (4) Laterite Soil

(5) Mountain Soil (6) Desert Soil (Explain it)

**Q5. What is regur soil ? Write its two features. Mention any two regions where regur**

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**soil is found.**

**Ans.** Regur soil – Black Soil

Features

- 1) made up extremely fine
- 2) have good capacity to hold moisture.
- 3) develop deep cracks during hot weather.
- 4) rich in calcium carbonate, potash and lime

Regions

- 1) Maharashtra – Malva Plateau
- 2) Madhya Pradesh and Chhatisgarh Plateau