UDAAN 2025

SST

Resources and Development (Important Questions)

SECTION - A (1 MARKS)

1. Which soil has higher concentration of Kankar nodules?
(a) Khadar ‘
(b) Bhangar
(c) Red Soil
(d) Yellow Soil

2. Alluvial Soils extend in _____ and _____ through a narrow corridor
(a) Rajasthan and Gujarat
(b) Rajasthan and Himachal
(c) Gujarat and Maharashtra
(d) Gujarat and Karnataka

3. Which is the most ideal location for finding black soil?
(a) The Himalayan Region
(b) The Andaman and Nicobar Islands
(c) The Deccan Trap Region
(d) The Thar Desert Region

4. Red Soils develop reddish colour due to _____ in crystalline and metamorphic rocks.
(a) Diffusion of calcium
(b) Diffusion of carbon dioxide
(c) Diffusion of magnesium
(d) Diffusion of Iron

5. Red Soil in its hydrated form appears to be _____.
(a) Green
(b) White
(c) Yellow
(d) Blue

6. Which of the following are true with respect to Laterite Soils?
(a) It develops under tropical and subtropical climate
(b) It requires alternative wet and dry season
(c) It is formed due to intense leaching due to heavy rain
(d) All of the above

7. Red laterite soils in Tamil Nadu, Andhra Pradesh and Kerala are used to grow crops like
(a) Wheat
(b) Jute
(c) Rice
(d) Cashew Nut

8. Arid soils range from _____ to _____ in colour.
(a) Red to Brown
(b) Red to Black
(c) Red to Orange
(d) Red to Yellow

9. Forest Soils are _____ and _____ in the valley sides.
(a) Loamy and Dry
(b) Loamy and Coarse
(c) Loamy and Silty
(d) Dry and Silty

10. The running water cuts through the clayey soils and makes deep channels causing _____.
(a) Sheet Erosion
(b) Wind Erosion
(c) Gully Erosion ‘
(d) Channel Erosion

11. Materials in the environment which have the potential to satisfy human needs but human beings do not have the appropriate technology to access these are called
(a) Biotic Resources
(b) Stock
(c) Renewable Resources
(d) International Resources

12. _____ are the subset of the stock, which can be put into use with the help of existing technical ‘know-how’.
(a) Reserves
(b) Stock
(c) Renewable Resources
(d) Potential Resources

13. For a material to be a resource, it should be
(a) Technologically Accessible
(b) Economically Feasible
(c) Culturally Acceptable
(d) All of these

14. Oceanic area up to 12 nautical miles (22.2 km) from the coast termed as
(a) National waters
(b) Territorial waters
(c) Aquatic border
(d) Base borders

15. Rajasthan and Gujarat have enormous potential for the development of
(a) Wind energy
(b) Solar energy
(c) Tidal energy
(d) Both (a) and (b) are correct

SECTION - B (2 MARKS)

16. Name three states having black soil and the crop which is mainly grown in it.

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

18. "Resources are a function of human activities." Justify this statement.

19. Explain the classification of resources on the basis of origin and give one example of each.

20. Mention two types of renewable resources and give one example of each type.

SECTION - C (3 MARKS)

21. Explain the types of resources based on ownership and give one example of each type.

22. How do stocks differ from reserves? Explain briefly.

23. "Resource planning is essential for sustainable existence." Discuss.

24. "Resource Planning is a complex process and needs to be carried out in stages". Elaborate.

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

SECTION -D (4 MARKS)

26. Read the following passage and answer the questions:
At the international level, the Club of Rome advocated resource conservation for the first time in a more systematic way in 1968. Subsequently, in 1974, Gandhian philosophy was once again presented by Schumacher in his book Small is Beautiful. The seminal contribution with respect to resource conservation at the global level was made by the Brundtland Commission Report, 1987. This report introduced the concept of 'Sustainable Development' and advocated it as a means for resource conservation, which was subsequently published in a book entitled Our Common Future. Another significant contribution was made at the Earth Summit at Rio de Janeiro, Brazil in 1992.

i. When was the first Earth summit held?

ii. Which objective was adopted at the First Earth summit?

iii. What was the Brundtland Report aimed at?

SECTION - E (5 MARKS)

27. Explain the land use pattern in India and why has the land under forest not increased much since 1960-61.

28. What is soil erosion? Explain the major types of soil erosion.

Hints and Solutions

1. (b)

2. (a)

3. (c)

4. (d)

5. (c)

6. (d)

7. (d)

8. (a)

9. (c)

10. (c)

11. (b)

12. (a)

13. (d)

14. (b)

15. (d)

16. 3 states are:
i. Maharashtra
ii. Gujarat
iii. Madhya Pradesh
The crop grown is cotton.

17. The main techniques that can be used are given below.
i. Contour ploughing
iii. Terrace farming
iii. Strips of grass are allowed to grow between the crops. This method is known as strip cropping.

18. a. Mere presence of resources, as free gifts of nature, does not make them resources. Human beings are essential components of resources because they transform material available in our environment into resources.
b. The utility of resources depends on the stage of cultural development of man and the tools and technology used by him.

19. On the basis of origin, resources can be classified as Biotic and Abiotic.
a. Biotic Resources are obtained from the biosphere. They have life or are living resources, e.g., human beings, fisheries, forests, etc.
b. Abiotic Resources include all non-living things, e.g., rocks and minerals.

20. Two types of renewable resources are as follows:
i. Continuous or Flow Resources, e.g., wind and water resources.
ii. Biological Resources, e.g., natural vegetation (forests) and wildlife.

21. On the basis of ownership, there are four types of resources:
i. Individual Resources: Resources which are owned privately by individuals, e.g., farmers own pieces of land or houses. Plantation, pasture lands, water in wells are some resources owned by individuals.
ii. Community Owned Resources: These resources are accessible to all the members of the community, e.g., village ponds, public parks, playgrounds in urban areas are accessible to all the residents of that area.
iii. National Resources: All the resources within the political boundary of a nation including the territorial water (oceanic area up to 12 nautical miles from the coast) extending into the ocean and resources therein belong to the nation, e.g., all minerals, forests, wildlife, water resources, land etc.
iv. International Resources: There are international institutions which own and regulate some resources, e.g., The oceanic resources beyond 200 km of the Exclusive Economic Zone belong to the open ocean and no individual country can utilize these without the concurrence of international institutions.

22. a. Stock: Materials in the environment, which have the potential to satisfy human needs but man does not have the appropriate technology to access them are included among stock, e.g. 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 technical know-how to use them for this purpose.
b. Reserves: Reserves are the subset of the stock, which can be put into use with the help of existing technical 'know-how' but their full use has been postponed for meeting the future needs, e.g., forest reserves, iron-ore reserves, water in the dams etc.

23. a. Sustainable existence is a component of sustainable development which aims at development without damaging the environment and at the same time conserving for future generation.
b. Therefore, resource planning is necessary for judicious, rational and equitable distribution and proper utilisation of resources.
c. It has become essential for a sustained quality of life and global peace.

24. Three stages of resource planning:
i. Identification and inventory of resources across the regions of the country. This involves surveying, mapping and the 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
iii. Matching the resource development plans with overall national development

25. The type of soil found in river deltas is Alluvial Soil.
i. It is very fertile and, therefore, good for the cultivation of crops
ii. It consists of various proportions of sand, silt and clay
iii. Alluvial soil has a good quantity of potash, lime and phosphoric acid, which is good for the growth of paddy and sugarcane.

26.
i. 1992

ii. Agenda 21

iii. Brundtland Commission Report, 1987 introduced the concept of sustainable development and advocated it as a means for resource conservation.

27. a. The use of land is determined both by physical factors, such as topography, climate, and soil types, as well as by human factors, such as population density, technological capability, culture, traditions etc.
b. The pattern of the net sown area varies greatly from one state to another. It is over 80 per cent of the total area in Punjab and Haryana and less than 10 per cent in Arunachal Pradesh, Mizoram, Manipur and Andaman Nicobar Islands.
c. Forest area in the country is far lower than the desired 33 per cent of the geographical area, as it was outlined in the National Forest Policy (1952). It was considered essential for the maintenance of the ecological balance.
d. A part of the land is termed a wasteland, and it is put to other non-agricultural uses like settlements, roads, railways, industry etc.
e. It includes rocky, arid and desert areas. Continuous use of land over a long period of time without taking appropriate measures to conserve and manage it has resulted in land degradation

28. a. The denudation of the soil cover and subsequent washing down is described as soil erosion.
b. The main activities like de-forestation, overgrazing, construction and mining and also natural agents like wind, running water are the main causes of soil erosion.
c. Following are the major types of soil erosion:
d. Gully Erosion:
The running water cuts through the clayey soils and makes deep channels, called gullies. They make the land unfit for cultivation. Such lands are called ‘Badlands’.
e. Sheet Erosion:
Sometimes water flows as a sheet over large areas down a slope. In this case the top layer of the soil is washed away.
f. Wind Erosion:
Wind blows off loose and dry soil from flat and sloping land causing erosion.