

- Q) Which one of the following reasons is best suitable
as to why human beings are called the ultimate
(best) resource on the Earth?

Ans) Human beings can explore, develop and convert the material resources into useful goods as per the abilities and demands.

- Q) Listed below are some important principles of sustainable development. Which among them is not true with respect to principles of sustainable development.

Ans) Maximise the depletion of natural resources.

- Q) These resources are inorganic in nature and constitute minerals, rocks, soils etc.

Ans) Abiotic resources.

4) On the basis of the availability of supply

Natural resources can be classified as
Ubiquitous and localised resources.

5) Match the items given in column A correctly to those given in column B.

Column A	Column B
i) Resource	(a) A renewable source of energy
ii) Windmill	(b) Human-made resource
iii) Plants & trees	(c) Abiotic resource
iv) A vehicle	(d) Utility
v) Rocks & minerals	(e) Biotic resources

- Fill in the blanks.
- 1) Air is a ubiquitous resource since it is found everywhere.
 - 2) Physical factors affecting the presence of local resources are terrain, altitude, climate.
 - 3) Using resources carefully and giving them time to renew is called resource conservation.
 - 4) An actual resource today might have been a potential resource some time ago.

Ch-2 Land, soil and water resources

- 8) Write a brief note on wind power

Ans) Wind power is the fastest-growing energy source in the world. A wind turbine works the opposite of a fan. Instead of using electricity to make wind, a turbine uses the wind to produce electricity. The wind turns the blades, which spin a shaft, which connects to a generator and produce electricity. The electricity is sent through transmission and distribution lines to a substation, then on to ~~homes~~ homes, business houses and schools. Wind turbines do not have any adverse effect on the environment. That's why wind power is gaining popularity. It is also becoming economically competitive with more conventional power sources - a fact that greatly improving its prospects as a viable energy source.

9) Classify land on the basis of ownership?

Ans) Land can be classified on the basis of ownership as - private land and community land. Private land ~~is owned~~ belongs to an individual whereas Community land is owned by a group of people in a community for common uses like collection of fodder, fruits, nuts or medical herbs. These lands are also referred to as common land or common property resources.

10) How land is being degraded? Suggest methods to conserve land resources.

Ans) Land degradation refers to the decline in the productivity of cultivated land or forest land. Generally land degradation results from unsuitable and unscientific use of land use. Over-exploitation of land resources and concretisation causes land degradation. The rate of degradation of land resources can be checked by promoting afforestation, land reclamation, regulated use of chemical pesticides and fertilizers, planting of shelterbelts, controlled mining and checks on overgrazing.

11) Describe methods of soil conservation.

Ans → Methods of soil conservation are

⇒ Mulching : The open ground between plants is covered with a layer of organic matter like straw or pit to prevent loss of moisture from the soil. The process of conserving soil by retaining the moisture in the soil, is called mulching.

⇒ Contour Bunding : On hill sides, stones are used to build barriers across the slope following contours. Trenches are made in front of barriers to collect water. This way of preventing soil erosion is called contour barriers or contour bunding.

⇒ Plugging : Rocks are piled up to slow down the flow of water. This prevents soil erosion by plugging the gullies to prevent soil loss.

Q) Mention ways in which energy can be saved at home. Give 5 points.

Ans → Energy can be saved at home by

(i) using solar energy

(ii) using biogas as cooking fuel

(iii) drying clothes in sunlight instead of electric dryers.

(iv) switch off fans and lights when not in use.

v) use pressure cooker for cooking.

13) Write a very short note on distribution of Iron in India.

Ans India has one of the largest reserves of iron-ore in Asia. Haematite and magnetite are the two main types of iron-ore found in India. The iron-ore mines are found close to the coal fields in the Chota Nagpur Plateau, which is an advantage for industrial development. The mineral is found mainly in Odisha, Chhattisgarh, Karnataka, Jharkhand, ~~and~~ Goa, Madhya Pradesh, Maharashtra, Assam and Rajasthan are some other places where iron-ore is found.

14) What are the advantages of conventional and non-conventional source of energy? Give examples.

Ans ~~The~~ Conventional source of energy
Advantages

- 1) They are widely accessible and hence they can be used widely.
- 2) They find both commercial and industrial purposes.
- 3) They are the basis of many industries. For example, fossil fuels are the basis of functioning of many petrochemicals and other related industries.

Examples

- 1) Examples of conventional source of energy are coal, petroleum, gas etc.

Non conventional source

Advantages

- They are renewable source of energy.
- They can be produced continuously in nature.
- They are exhaustible resources.

Examples

Examples of non-conventional source of energy are solar energy, wind energy, tidal energy, geothermal energy etc.

15) Write a short note about Petroleum and Natural gas.

Ans) Petroleum

Petroleum is found as crude oil trapped in between the layers of sedimentary rock. It is black. It is drilled from on-shore and off-shore oil fields. Petroleum is an essential source of energy for all internal combustion engines in automobiles, railways and aircraft. The world leader in petroleum production is USA.

Natural gas

Natural gas is found along with petroleum deposits. The natural gas released when crude oil is drilled and brought out to the Earth surface. Natural gas can be domestic and industrial fuel. Russia, Norway, Netherlands and UK are the major producers of natural gas.

16) What is hydel power?

Ans) Water from rivers and rains is stored in dams. This water falls from great heights onto turbine blades making the blades rotate. The rotating blades then turn the generator to produce electricity. This is called hydel power or hydroelectric power.

17) Which sources of energy would you suggest for

- (a) Arid regions (c) Coastal areas
- (b) Rural areas

Ans) (a) Arid regions: Solar energy and geothermal power will be best suited for arid regions

(b) Rural areas: Firewood, coal, solar energy and biogas can be used in rural areas.

(c) Coastal areas: Petroleum, tidal power and wind power can be used in coastal areas.

18) What is obtained from Quartz?

Ans) Silicon

19) What is the ore of aluminium?

Ans) Bauxite

20) Explain the farm system?

Ans) Agriculture or farming is a system in which seeds, fertilizers, machinery & labour are important inputs.

- * ploughing, sowing, irrigation, weeding & harvesting are some of the operations.
- * The output from the system include crops, dairy, wool & poultry products.
- * Farming includes the rearing of crops as well as animals.
- * Farming removes the concern of farmers of bad crops & crop loss as well.

Q) what is shifting cultivation? Mention the disadvantages.

Ans - stages.

Shifting cultivation is a type of farming where a small area of a forest is cleared by cutting down all the trees & the area is burned. The ashes are mixed with the soil to make it more fertile & this land is used for growing crops. After the land has lost its fertility, it is abandoned. The farmer then moves to a new place & the farmer goes on to a new plot.

Some of the disadvantages of this form of farming

* Deforestation of land

* The soil loses its fertility with time

* Erosion of the soil

* Small farming plots that are insufficient to feed a large populations.

22. Different crops are grown in different regions.

Ans - The type of crops grown is dependent upon the type of soil & the type of climate of a region. Different regions have different soil types & climatic conditions. This is why a crop may have favourable factors of growth in one region & adverse factors of growth in another. The demand for the produce, labour & level of technology are also some factors that decide the type of crops grown in a particular region.

23. Difference between subsistence farming & intensive farming.

Ans subsistence farming

* This type of farming is done to fulfil demands of the family.

intensive farming

* This type of farming is done on a small farm using simple tools & more labour. It is found in thickly populated areas of India & China.

* In this type of farming irrigation is used.

* It depends upon monsoon & the fertility of the soil.

* Since it is a slash & burn agriculture the farm is burnt for a period of time to regain its fertility.

* This type of farming is done continually year after year to feed the growing population.

24. Write a short note on Nomadic Herding.

Ans. Nomadic herding is practised in the semi-arid & arid regions of Sahara, Central Asia & some parts of India, like Rajasthan, Jammu & Kashmir.

In nomadic farming herders move from place to place with their animals for fodders & water along a definite route. The nomads move from place to place due to the restraints of the climate & land. Sheep, camel, yak & goats are most commonly reared by the nomads. These animals provide milk, meat wool, hides & other products to the herders.

25. Which form of agriculture is best suited for our country? why?

Ans. In India land sizes are not very extensive. Hence the best way of agriculture in India should be extensive agriculture. As this method involves a lot of expenditure; govt. should extend suitable aid to the farmers.

26) Maize and ^{wheat} crops are raised in commercial grain farming.

27) China is a leading producer of rice.

28) Viticulture is cultivation of grapes.