

Management Of Natural Resources

Multiple Choice Questions

Question 1.

From the list given below pick the item that is not a natural resource

- A. Soil
- B. Water
- C. Electricity
- D. Air

Answer:

Soil, water and Air are natural resources because these resources are obtained from environment whereas by using natural resources, humans produce electricity and therefore it is not a natural resource instead it is a man-made source. Therefore, in above options, only electricity cannot be termed as natural resource.

Question 2.

The most rapidly dwindling natural resource in the world is

- A. Water
- B. Forests
- C. Wind
- D. Sunlight

Answer:

Water, Wind and Sunlight are the natural resources which can't be exhausted but since forests are being cut down by human for his own use in large amount and due to which it is rapidly dwindling. So, Forest is the correct answer.

Question 3.

The most appropriate definition of a natural resource is that it is a substance/ commodity that is

- A. present only on land

- B. a gift of nature which is very useful to mankind
- C. a man-made substance placed in nature
- D. available only in the forest

Answer:

Since natural resource can be land, water, soil, air etc. So, natural resources are not limited to only 'land' and 'forest'. Therefore, option 'a' and option 'd' are not correct. Also, natural resources are obtained from nature and are not man-made. So, option 'c' is also not correct. A natural resource is the one which we get from nature and it is very useful for human. Therefore, correct answer is option (b)

Question 4.

The main cause for abundant coliform bacteria in the river Ganga is

- A. disposal of unburnt corpses into water
- B. discharge of effluents from electroplating industries
- C. washing of clothes
- D. immersion of ashes

Answer:

The main reason of originating of coliform bacteria is from the human excrete or waste of human. It is possible that human excreta is present in unburnt corpse, which when disposed into water of river Ganga, there is abundance of Coliform bacteria.

Question 5.

The pH of water sample collected from a river was found to be acidic in the range of 3.5 – 4.5. On the banks of the river were several factories that were discharging effluents into the river. The effluents of which one of the following factories is the most likely cause for lowering the pH of river water?

- A. Soap and detergent factory
- B. Lead battery manufacturing factory
- C. Plastic cup manufacturing factory
- D. Alcohol distillery

Answer:

The process which is involved in alcohol distillery is Fermentation. During the process of Fermentation, the products obtained are Ethanol and Lactic acid. Ethanol is oxidized to produce Ethanoic acid. When the effluents are discharged into the river, the presence of acids in the effluents will lower the pH of the water of river. Hence, option 'd' is the correct answer.

Question 6.

The pH range most conducive for life of fresh water plants and animals is

A. 6.5 – 7.5

B. 2.0 – 3.5

C. 3.5 – 5.0

D. 9.0 – 10.5

Answer:

For the life of fresh water plants and animals, the pH value should be neutral i.e. at 7. Since in above options, the value of neutral pH lies in range 6.5-7.5. Therefore, this pH range is closest to the neutral value. So, option 'a' is correct answer.

Question 7.

The three R's that will help us to conserve natural resources for long term use are

A. recycle, regenerate, reuse

B. reduce, regenerate, reuse

C. reduce, reuse, redistribute

D. reduce, recycle, reuse

Answer:

Reducing the usage of natural resources to a limited amount without wasting it helps in saving our natural Resources for long time. Since Plastic, paper, glass can be used again and again by recycling them and thus helps in conserving natural resources for long term. Reusing the used things again and again also helps in conserving the natural resources. So, the three R's are Reduce, Recycle and Reuse.

Question 8.

Given below are a few statements related to biodiversity. Pick those that correctly describe the concept of biodiversity

- (i) Biodiversity refers to the different species of flora and fauna present in an area
 - (ii) Biodiversity refers to only the flora of a given area
 - (iii) Biodiversity is greater in a forest
 - (iv) Biodiversity refers to the total number of individuals of a particular species living in an area
- A. (i) and (ii)
- B. (ii) and (iv)
- C. (i) and (iii)
- D. (ii) and (iii)

Answer:

Since all the flora and fauna comes under Biodiversity. Generally, Plants and animals are present in greater degree/ amount in a forest. Therefore (i) and (iii) are correct answer.

Question 9.

Among the statements given below select the ones that correctly describe the concept of sustainable development

- i. Planned growth with minimum damage to the environment
 - ii. Growth irrespective of the extent of damage caused to the environment
 - iii. Stopping all developmental work to conserve the environment
 - iv. Growth that is acceptable to all the stakeholders
- A. (i) and (iv)
- B. (ii) and (iii)
- C. (ii) and (iv)
- D. (iii) only

Answer:

Sustainable development is that development which should take place with minimum damage to the environment and without compromising with the needs of the future generation. It should be accepted by all stake holders. So, option 'i' and 'iv' are correct statements.

Question 10.

In our country, vast tracts of forests are cleared and a single species of plant is cultivated. This practice promotes

- A. biodiversity in the area
- B. monoculture in the area
- C. growth of natural forest
- D. preserves the natural ecosystem in the area

Answer:

Monoculture as the name suggest cultivation of a mono mean single species of plant. So, this practice promotes monoculture. So, option (B) is the correct answer.

Question 11.

A successful forest conservation strategy should involve

- A. protection of animals at the highest trophic level
- B. protection of only consumers
- C. protection of only herbivores
- D. comprehensive programmed to protect all the physical and biological components

Answer:

A balance can't be made at one trophic level. There is need for comprehensive programmed so that physical as well as biological components can be protected instead of only animals or only consumers or only herbivores. So, option (d) is the correct answer.

Question 12.

The important message conveyed by the 'Chipko Movement' is

- A. to involve the community in forest conservation efforts
- B. to ignore the community in forest conservation efforts

C. to cut down forest trees for developmental activities

D. government agencies have the unquestionable right to order destruction of trees in forests

Answer:

The Chipko movement was started to stop the cut down of forests. In this movement, people were involved to conserve forests and stop the destruction due to cut down of forests. So, option (a) is correct answer.

Question 13.

In our country, there are attempts to increase the height of several existing dams like Tehri and Almati, dams across Narmada. Choose the correct statements among the following that are a consequence of raising the height of dams

(i) Terrestrial flora and fauna of the area is destroyed completely

(ii) Dislocation of people and domestic animals living in the area

(iii) Valuable agricultural land may be permanently lost

(iv) It will generate permanent employment for people

A. (i) and (ii)

B. (i), (ii) and (iii)

C. (ii) and (iv)

D. (i), (iii) and (iv)

Answer:

On increasing the height of a dam, the terrestrial flora and fauna gets submerged in the water and gets destroyed. Moreover, due to increasing the height of dam, people who are living nearby are dislocated from their places and agricultural land also gets permanently lost because it comes under the catchment area. So, option (B) is the correct answer.

Question 14.

Expand the abbreviation GAP

A. Governmental Agency for Pollution Control

B. Gross Assimilation by Photosynthesis

- C. Ganga Action Plan
- D. Governmental Agency for Animal Protection

Answer:

GAP stands for Ganga Action Plan.

Question 15.

Select the incorrect statement

- A. Economic development is linked to environmental conservation
- B. Sustainable development encourages development for current generation and conservation of resources for future generations
- C. Sustainable development does not consider the view-points of stakeholders
- D. Sustainable development is a long planned and persistent development

Answer:

Sustainable development considers the view-points of stake holders. Sustainable development should be acceptable by all stakeholders. Involving of all the stake holders during various movements like Chipko Movement proves that sustainable development considers the view-points of stake holders. So, option (C) is the correct answer.

Question 16.

Which of the following is not a natural resource?

- A. Mango tree
- B. Snake
- C. Wind
- D. Wooden house

Answer:

Natural resources are those resources which we get from nature. Mango Tree, Snake and wind are the natural Resources. Bur wooden house is a man- made. So, it is not a natural resource instead it is a man- made resource.

Question 17.

Select the wrong statement

- A. Forests provide variety of products
- B. Forests have greater plant diversity
- C. Forests do not conserve soil
- D. Forests conserve water

Answer:

The root of the trees holds the topsoil and results in soil conservation. Forest proves beneficial during soil erosion and holds the soil at their place.

Question 18.

Arabari forests of Bengal is dominated by

- A. Teak
- B. Sal
- C. Bamboo
- D. Mangroove

Answer:

Hardwood Sal is found to be dominative in the Arabari forests of Bengal. It is a commercially remunerative crop.

Question 19.

Ground water will not be depleted due to

- A. Afforestation
- B. thermal power plants
- C. loss of forest, and decreased rainfall
- D. cropping of high water demanding crops

Answer:

Afforestation which means growing of trees in large amounts helps in recharging the water present underground and thus helps in fulfillment of the water requirement by having a positive impact on water table. Therefore, Groundwater can't be depleted due to Afforestation.

Question 20.

Opposition to the construction of large dams is due to

- A. social reasons
- B. economic reasons
- C. environmental reasons
- D. all the above

Answer:

Construction of large dams will lead to dislocation of people from that place, submerging of flora and fauna. Moreover, a huge cost is required to construct the dams. So, social, economic as well as environment reasons are in opposition of construction of large dams.

Question 21.

Khadins, Bundhis, Ahars and Kattas are ancient structures that are examples for

- A. grain storage
- B. wood storage
- C. water harvesting
- D. soil conservation

Answer:

Water harvesting is an age-old concept in India and is practiced in India from years. Khadin structures are practiced in Rajasthan for water harvesting, Bundhis in Madhya Pradesh and Uttar Pradesh, Ahars in Bihar and Kattas in Karnataka. These types of ancient structures are still used for water harvesting. So, option (c) is the correct answer.

Question 22.

Pick the right combination of terms which has no fossil fuel.

- A. Wind, ocean and coal

- B. Kerosene, wind and tide
- C. Wind, wood, sun
- D. Petroleum, wood, sun

Answer:

In above question, Coal, Kerosene and Petroleum comes under fossil fuels. So, the correct answer is: option (C).

Question 23.

Select the eco-friendly activity among the following

- A. Using car for transportation
- B. Using polybags for shopping
- C. Using dyes for coloring clothes
- D. Using windmills to generate power for irrigation

Answer:

Use of Wind-mills for generating power for irrigation is an ecofriendly activity because Wind is a natural resource and is a renewable resource. Moreover, it doesn't provide any harm to the nature.

Question 24.

It is important to make small check dams across the flooded gullies because they

- i. hold water for irrigation
- ii. hold water and prevent soil erosion
- iii. recharge ground water

iv. hold water permanently

- A. (i) and (iv)
- B. (ii) and (iii)
- C. (iii) and (iv)
- D. (ii) and (iv)

Answer:

Across the flood gullies; small check dams are made so that they hold the water and erosion of top most layer of soil can be prevented by the water. Construction of small check gullies across flood gullies also helps in recharging of ground water as water is hold for sometimes.

Short Answer Questions

Question 1.

Prepare a list of five items that you use daily in the school. Identify from the list such items that can be recycled.

Answer:

The five items which are used in schools and can be recycled are paper, plastic water bottle, school bags made up of cotton, plastic lunch boxes and pencils. Since paper, cotton, plastic and wood obtained from pencils can be recycled again and again and can be used.

Question 2.

List two advantages associated with water harvesting at the community level.

Answer:

The advantages which are associated with the water harvesting at the community level are:

1. Harvesting of water fulfills the need of water throughout the year as Saved water can be used for various purposes. This ensures availability of water throughout the year.
2. Saving of water leds to availability of water to each and every one. Moreover, it led to moisture of land for vegetation growth thus beneficial for community.

Question 3.

In a village in Karnataka, people started cultivating crops all around a lake which was always filled with water. They added fertilizers to their field in order to enhance the yield. Soon they discovered that the water body was completely covered with green floating plants and fishes started dying in large numbers. Analyses the

situation and give reasons for excessive growth of plants and death of fish in the lake.

Answer:

This situation is known as Eutrophication which is defined as the the growth of green floating plants in water in excess amount. Moreover, due to addition of fertilizers, Algae are grown in water because they require nitrates in water to grow and nitrate was present in the fertilizers. The situation mentioned above is very serious as due to growing up of large green floating plants, most of the Oxygen is utilized by them and there is no Oxygen left for water bodies like fishes. Due to lack of Oxygen to them, the fishes are dying in large amount.

Question 4.

What measures would you take to conserve electricity in your house?

Answer:

Following measures can be taken for conservation of electricity in my house:

- (a) Switching off all the electrical appliances, fans and tube lights when they are not in use.
- (b) Saving electricity by limiting the use of electricity for example, in day time tube-lights and fans can be switched off. Instead, window should be open to get the light and air.
- (c) Limiting the use of appliances like T.V., and Air conditioners.
- (d) Replacing all the 100 watt bulbs with LED tube-light which consumes less power.
- (e) Avoiding the use of lighting for decoration during any festival.
- (f) Limiting the use by not wasting electricity where it is not necessary to use.

Question 5.

Although coal and petroleum are produced by degradation of bio- mass, yet we need to conserve them. Why?

Answer:

Coal and Petroleum are the natural resource and are non-renewable. Once they exhausted, they can't be renewed again for millions of years. Coal and Petroleum are being used at a faster rate and with this rate, they will replenished soon and will not be renewed again. So, it is necessary to conserve coal and Petroleum.

Question 6.

Suggest a few measures for controlling carbon dioxide levels in the atmosphere.

Answer:

Carbon dioxide levels in the atmosphere can be controlled by using the following steps:

- (a) Avoiding the use of firewood and cow dung cakes for producing fire as it results in emission of Carbon dioxide in the air. Instead LPG should be used in the house for various purposes. It will help in reducing the amount of carbon dioxide in the environment.
- (b) Avoiding use of plants and trees to light up the fire. Instead they should be used for making the manure.
- (c) Avoiding use of petrol and Diesel in the automobiles. Instead compressed natural gas should be used in the vehicles as it is environment friendly.
- (d) Avoiding use of perfumes, Deodorants or Air conditioners as they contains chloro-fluoro-carbon i.e. CFC's which changes the level of carbon dioxide in the environment.
- (e) Avoiding use of private vehicles, instead Public transport should be used for travelling.

Question 7.

What are the advantages of groundwater over water in rivers and ponds?

Answer:

The various advantages of groundwater over water from rivers and ponds are as follows:

1. Ground water has lesser chances to get contaminated as it is covered whereas water in rivers is contaminated and there is risk of diseases also.

2 Since ground water is covered and therefore, it doesn't get evaporated whereas this is not so in case of water in rivers.

3 Groundwater is suitable for drinking purposes whereas river water is not suitable as it is contaminated.

Long Answer Questions

Question 1.

In the context of conservation of natural resources, explain the terms reduce, recycle and reuse. From among the materials that we use in daily life, identify two materials for each category.

Answer:

To conserve the natural resources, it is necessary to follow the three R's which stands for Reduce, Recycle and Reuse.

Reduce: To conserve the natural resources, it is necessary that the use of resources should be limited. The use of Natural resources should be reduced. They should be used only when there is strong need otherwise not. Consuming of resources reduces results in demand of resources in factories which automatically reduces amounts in which they are manufactured. So, Reduce, Recycle and Reuse should be accepted.

For example: electricity, Water. The use of electricity and water can be reduced upto some level as the use of electricity and water can be reduced which results in conservation of natural resources.

Recycle: There are materials which can be recycled and can be reused again by recycle. However, there is some requirement of energy to require them but it helps in conserving the natural resources.

Paper, Plastic etc. can be recycled and reused again. It will result in less demand of natural resources and thus helps in saving them.

Reuse:

The third R is Reuse which means reusing the old items or resources again and again for various purposes. It will help in reducing the demand for new items.

The common examples are: Water, Empty bottles. Since water left after washing clothes can be used for various purposes such as watering the plants, mopping the floor etc. Empty bottles can be used for other purposes like keeping water in refrigerators or other things.

Reduce, Reuse and Recycle will help in conserving the natural resources so that they can be saved for future generation.

Question 2.

Prepare a list of five activities that you perform daily in which natural resources can be conserved or energy utilization can be minimized.

Answer:

The daily activities in which natural resources can be conserved are as follows:

1. Use of public transport instead of personal vehicle to travel. It will help in saving the fuel.
2. Reusing the water left from washing clothes for washing utensils. It will save water.
3. Minimizing the use of appliances like T.V. and A.C. This will reduce use of electricity.
4. Usage of staircase instead of lifts will again help in saving electricity or fossil fuels.
5. Avoiding use of cow-dung cake or wood for cooking food instead using LPG for cooking. It will save trees.

Question 3.

Is water conservation necessary? Give reasons.

Answer:

Water is the basic necessity for all terrestrial forms of life. Conservation of water is very essential because it is needed for all the biological activities but human intervention have resulted in changes in the availability of water in various places.

Water is available on Earth in large amount but most of the water is saline and therefore can't be consumed. Only 1% of the total water is available in potable form. Therefore, water is very precious for survival. Applications of water is not limited. It is used for various processes such as for daily usage, irrigation in crops, by industries for goods production etc. Since, the supply of the potable water is less and the demand is very high with increasing population. Therefore it is necessary to save the water so that there is no shortage of water for future generation. As there is no survival if there is no water.

Question 4.

Suggest a few useful ways of utilizing waste water.

Answer:

The waste water can be utilized in various manners:

1. Water left after washing clothes should be used for various purposes so that it is not wasted such as for watering the plants in the garden.
2. The water left from washing fruits and vegetables should be used for watering fruits or cleaning the floor.
3. Water which comes out from AC outlet can be used for cleaning purposes like mopping the floor or in toilets.
4. Rain water can be used in water-coolers.

Question 5.

What is the importance of forest as a resource?

Answer:

Forests are important in various manners which can be explained as follows:

- i) Forests provides various natural resources which are important for livelihood of common people such as wood, lac, medicinal plants, bamboo, fruits etc.
- ii) Forests play an important role in maintaining the balance of carbon dioxide and Oxygen gas in the nature.
- iii) Forests support agriculture by being a contributor in bringing the rain through transpiration process. Trees facilitate recharge of groundwater because roots make the soil porous.
- iv) Forests play an important role during floods by preventing the erosion of soil topmost layer due to water or air.
- v) Forests acts as a raw material source for industrialists.

Question 6.

Why are the Arabari forests of Bengal known to be a good example of conserved forest?

Answer:

Arabari forests are a good example of conserved forest because local people were involved in conservation programmed to conserve the Arabari forest. Arabari forests are located in Midnapore district of West Bengal. In year 1972, the West Bengal forests department has realization that they are failing in reviving the degraded Sal forests. There were conflicts between forests officials and villagers. The department then changed the strategy and the villagers were involved by the department for protecting the forests land of 1.272 hectare. In return the department gave the employment to the villagers in Silviculture and harvesting operations. The villagers were allowed by the department for collecting fuelwood and fodder after paying some nominal fee. By 1983, due to active participation of villagers in this strategy of forests department, Arabari forest was recovered and the value of this forest was then Rs. 12.5 crores.