

# Very Short Answer Type Questions

#### 1. Name two fossil fuels.

Answer

Petroleum and coal are two fossil fuels.

### 2. Name the major programme started to replenish forests.

Answer

The major programme started to replenish forests is Silviculture.

# 3. Apart from the availability of forest products, name two other things which are affected by the destruction of forests.

#### Answer

Apart from the availability of forest products, the habitat of wild animals, the quality of soil and water resources also get affected due to the destruction of forests.

4. Name the rivers with which the following dams are associated:
(a) Tehri Dam
(b) Sardar Sarovar Dam
(c) Bhakra Dam

Answer

- (a) Bhagirathi river
- (b) Narmada river
- (c) Satluj river

5. Name two factors which can be used to find whether river water has been contaminated.



Answer

Presence of coliform bacteria in the river water can be used to find whether river water has been contaminated.

# 6. Name the bacteria whose presence in water indicates the contamination with disease-causing micro-organisms.

#### Answer

The presence of Coliform bacteria in water indicates the contamination with disease-causing microorganisms.

# 7. With which process are the following ancient structures associated? Kulhs, Eris, Surangams, Kattas, Pynes

Answer

Kulhs, Eris, Surangams, Kattas, Pynes are associated with rainwater harvesting.

#### 8. Which fossil fuel is conserved :

(a) when we save on electricity?

(b) When we use a bicycle for covering short distances instead of a motorbike?

- (a) Coal
- (b) Petroleum

# 9. What is the main purpose of rainwater harvesting?

Answer

The main purpose of rainwater harvesting is to save and conserve water for future use.

# 10. What is the name of the process in which rainwater falling on the earth is stopped from flowing and made to percolate into the ground?



Answer

Rainwater harvesting is the process in which the rainwater falling on the Earth is stopped from flowing and made to percolate into the ground.

# 11. Name the most common practice of recharging groundwater.

Answer

Rainwater harvesting is the most common practice of recharging groundwater.

# 12. The pH of a river water sample as measured by pH paper is found to be 6. What does it tell us about water?

Answer

The pH of a river water sample as measured by pH paper is found to be 6, it means that river water is polluted with acidic wastes.

# 13. Name the person who is most remembered for the protection of Khejri trees in Rajasthan.

Answer

Amrita Devi Bishnoi is most remembered for the protection of Khejri trees in Rajasthan.

# 14. State whether the following statement is true or false: Chipko Andolan was associated with the conservation of wild animals such as tigers and lions.

Answer

False

# 15. Write the full names of (a) CFL, and (b) CFC.

Answer

(a) Compact Fluorescent Lamp

(b) Chlorofluorocarbon



# 16. Choose one term from the following which include all others: coal, natural gas, fossil fuels, petroleum

Answer

The one terms which includes coal, natural gas and petroleum is fossil fuels.

# 17. Why is the process of 'reuse' better than that of 'recycling'?

Answer

The process of reuse is better than recycling because recycling needs more energy and resources for processing but reuse does not require anything. When we reuse a product, we use the same thing without processing. Thus, it is better than the process of 'recycling'.

### 18. Name a clean gaseous fuel other than LPG and natural gas.

Answer

Biogas is a clean gaseous fuel.

### 19. Fill in the following blanks with suitable words :

(a) LPG is a \_\_\_\_\_\_ fuel but biogas is not a \_\_\_\_\_\_ fuel.

(b) Glaciers are a source of \_

(c) One of the main aim of management of forests and wildlife is to conserve the \_\_\_\_\_\_ which we have inherited.

(d) Khadin is a traditional \_\_\_\_\_ harvesting system in Rajasthan.

(e)When a fuel burns in an insufficient supply of air, then some poisonous gas called \_\_\_\_\_\_ is also produced.

Answer

(a) LPG is a <u>fossil</u> fuel but biogas is not a <u>fossil</u> fuel.

(b) Glaciers are a source of water.

(c) One of the main aims of the management of forests and wildlife is to conserve the <u>biodiversity</u>, which we have inherited.



(d) Khadin is a traditional <u>rainwater</u> harvesting system in Rajasthan.
(e)When a fuel burns in an insufficient supply of air, then some poisonous gas called <u>carbon</u> <u>monoxide</u> is also produced.

# **Short Answer Type Questions**

### 20. What is meant by "sustainable development"?

Answer

Sustainable development is a kind of development that fulfils the basic needs of the present generation and also preserves the natural resources for the future generations.

### 21. What is silviculture? What are its advantages?

Answer

The programme that aims to grow more trees and plants in order to replenish forests silviculture. Following are the advantages of silviculture

- (a) Prevents natural calamities like flood.
- (b) Maintains the water cycle.
- (c) Helps in wildlife conservation
- (d) Provides different raw materials for industries like timber, wood paper and medicinal plants.

# 22. Write a short note on 'Chipko Andolan' (Hug the Trees Movement).

Answer

The movement which was started in Reni village in Garhwal to protect the trees by hugging them and not allowing cutting of these trees was called Chipko Andolan. The Chipko movement quickly spread across communities and media, and forced the government, to whom the forest belongs, to rethink their priorities in the name of forest produce. Due to the participation of local people, it led to the efficient management of forests.

# 23. Why should we conserve forests and wildlife?

Answers



We should conserve forests and wildlife because they are essential for us in the following terms:

- Forest provide us with oxygen, they cause rainfall.
- Forest prevents soil erosion.
- Plants are dependent on animals and birds for their pollination and seed dispersal.
- Forests provide us various medicines.
- Various forest products are used as raw materials in industries.

### 24. Describe briefly the 'khadin' system of rainwater harvesting practised in Rajasthan.

#### Answer

The 'Khadin' system of rainwater harvesting in Rajasthan is a very long (100 m - 300 m long) earthen embankment called 'Bund' built across the lower edge of the sloping farmland. The rainwater from the catchment area flows down the slopes and stopped by the 'Bund' to form a reservoir. The rainwater which collects in the reservoir formed by the 'Bund', and in the well, seeps slowly into the land (or ground). This water-saturated land is subsequently used for growing crops.

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

Electricity can be conserved in our houses by the following measures:

- Switching off lights and fans when not in use
- Using only sunlight during day time and using solar appliances
- Switching off the electrical appliances when not needed
- Using electrical efficient appliances like CFL
- Using manual techniques wherever possible instead of electrical ones

# 26. Although coal and petroleum are produced by the degradation of biomass, even then we need to conserve them. Why?

#### Answer

Coal and petroleum are the fossil fuels and their supply is limited on the Earth. Therefore, we need to conserve them. They are made by the degradation of biomass, but this practice takes millions of years.



#### 27. Is water conservation necessary? Give reasons.

Answer

It is very important to conserve water as it is the basic necessity of all living beings. All the living organisms on this planet need water. Humans, plants and animals, all need water for survival. But, the available freshwater on the Earth is limited. Therefore, it should be conserved.

# 28. Name the products of combustion of fossil fuels like coal and petroleum products. How do they affect us and our environment?

Carbon dioxide, sulphur dioxide, nitrogen oxide and water are produced by combustion of fossil fuels like coal and petroleum products. Their incomplete combustion produces carbon monoxide. Except for water, all other products are harmful to us and our environment. These harmful products causes acid rain, global warming etc.

# 29. Why should fossil fuels like coal and petroleum be used judiciously?

Answer

There is a need to use fossil fuels like coal and petroleum judiciously because they are formed from the remains of biomass buried in the soil millions of years ago. It is the continuous pressure, heat and time which convert the organic matter into coal and petroleum. Due to the slow and long process of formation of these fuels and the pollution caused by the products of combustion of these fossil fuels it is advisable to use them judiciously.

#### 30. What are the three R's to save the environment? Explain with one example of each.

Answer

The three R's are reduce, recycle and reuse.

Reduce aims at decreasing the usage of natural resources to avoid wastage. For example, using a minimal amount of water.

Recycle aims at using the discarded items by recycling them.

For example, recycling plastic the term Reuse means using the same thing again and again.



For example, using a paper bag over and over again.

# 31. What are the main uses of coal and petroleum products?

#### Answer

Following are the main uses of coal and petroleum products:

- These are transportation fuels
- Diesel is used to power turbines for the production of electricity in large scale industries.
- Oils help lubricate different types of high-end machines used in different industries, hospitals etc.

### 32. State any five steps to reduce the consumption of coal and petroleum products.

The consumption of coal and petroleum products can be reduced in the following ways:

- Use stairs instead of the lift to save electricity
- Use of bicycle or walk for short distances
- Using solar power
- Use public transport to save fuel
- Switch off lights, fans and other electrical appliances when not needed

# 33. Explain why, despite good rains, we are not able to meet the demand for water of all the people in our country.

#### Answer

Despite good rains, we are not able to meet the demands for water of all the people in our country because of the increase in population rate. Also, high yielding variety of crops require more water for irrigation. The water in urban areas gets polluted and contaminated due to the industrial waste. These all lead to scarcity of water in our country.

# 34. Give one example to show how the participation of local people can lead to the efficient management of forests.

The movement which was started in Reni village in Garhwal to protect the trees by hugging them and not allowing cutting of these trees was called Chipko Andolan. The Chipko movement quickly spread across communities and media, and forced the government, to whom the forest belongs, to rethink their



priorities in the name of forest produce. Due to the participation of local people, it led to the efficient management of forests.

# 35. Explain briefly, how rainwater harvesting is done from open spaces around the buildings in city areas.

### Answer

For rainwater harvesting from open spaces around the buildings in city areas, percolation pits are constructed and covered with concrete slabs having holes in it. They are connected to a recharge well via a pipe. The rainwater goes into the percolation pit through the holes of the slab cover. It gets filtered in the pit and enters the recharge well via an outlet pipe and then, slowly, seeps into the soil.

# Long Answer Type Questions

# 36. (a) What is a natural resource? Name three important natural resources.(b) Why do we need to manage our natural resources?

### Answer

(a) The resources present in the environment that can be used by humans are called natural resources. Three important natural resources are water, fossil fuels, like coal and petroleum, and forest and wildlife.

(b) We need to manage our natural resources because:

- They are limited in amount
- Natural resources keep the ecosystem and the environment in a balanced manner
- All the natural resources are interdependent on each other directly or indirectly
- The life on this planet earth is because of these natural resources

# 37. (a) State the advantages of constructing dams across the rivers.(b) Describe some of the problems associated with the construction of dams.

#### Answer

(a) Following are the advantages of constructing dams across the rivers:

- Water can be stored for future use
- Water from the dams can be used for the irrigation of crops via a network of canals
- Water falling from the dams is used to generate electricity in hydropower plants
- People living in cities, towns and villages will get an adequate amount of water for their use

# (b) Following problems are associated with building dams:



- It makes many people homeless, by submerging large areas of human- settlements, thereby causing a social issue.
- Causes deforestation and many life forms die due to this ecological imbalance
- A large number of farmers lose their farms and irrigation becomes difficult for them

# 38. (a) Name any five sources of water (other than rivers)(b) Describe how the water of the river Ganga has been highly polluted.

Answer

(a) The sources of water other than rivers are rains, oceans, lakes, glaciers and wells.

(b) The water of river Ganga has been polluted by various human activities like bathing, washing of clothes, the immersion of ashes of dead bodies and unburnt corpses in the river. The untreated sewage and industrial waste is also discarded in the river. More than a hundred towns and cities lie on this riverbank, which discharge their waste in it.

# 39. (a) Name the major industries which are based on forest produce.

(b) State the main aim of the management of forests and wildlife.

(c) Name the four main stakeholders in the management of forest resources.

Answer

(a) The major industries that are based on forest produce are paper mills as well as industries dealing in timber, lac and sports equipment.

(b) The main aim of the management of forests and wildlife is to conserve our biodiversity in order to maintain the ecological balance.

(c) The four main stakeholders in the management of forest resources are the people, the forest department, the industrialists and the forest and wildlife activists.

# 40. (a) What is meant by rainwater harvesting? Name some of the ancient structures used for rainwater harvesting by the rural people.

(b) What are the various advantages of water stored in the ground?

Answer

(a) Rainwater harvesting is the method of collecting rainwater so that it can percolate in the soil more efficiently. The ancient structures used for rainwater harvesting by the rural people are Khadin in Rajasthan, Bandharas and Tals in Maharashtra, and Ahars in Bihar.

(b) Following are the various advantages of water stored under the ground:

• It does not evaporate.



- It spreads out to recharge wells and provides moisture to the crops
- Water remains clean and unpolluted
- It is not contaminated by human and animal wastes
- Can be used whenever required

Multiple Choice Questions

### 41. The Bishnoi community of Rajasthan is associated with the conservation of:

- (a) coal and petroleum
- (b) forests and wildlife
- (c) water resources
- (d) abiotic environment

Answer

(b) forests and wildlife

# 42. The Chipko Andolan is associated with:

- (a) Tigers
- (b) Turtles
- (c) Trees
- (d) Tomatoes

Answer

(c) Trees

# 43. Amrita devi Bishnoi was associated with :

- (a) preventing the custom of child marriage in Rajasthan
- (b) campaign to save the girl child
- (c) conservation of the cultural heritage of Rajasthan
- (d) conservation of forests and wildlife

Answer

(d) Conservation of forests and wildlife

44. One of the following is not a direct stakeholder in the management (or conservation) of forests. This is :

(a) the people who have paper mills.



#### (b) the people who run the forest department

- (c) the people who campaign for the conservation of forests
- (d) the people who live in urban areas

Answer

(d) The people who live in urban areas

### 45. The river water is said to be polluted with acidic wastes if the pH of river water is:

- (a) zero
- (b) above 7
- (c) below 7
- (d) exactly 7

Answer

- (c) below 7
- 46. The major programme started to replenish the damaged forests is called:
- (a) horticulture
- (b) tissue culture
- (c) agriculture
- (d) silviculture

Answer

(d) silviculture

- 47. With which tree Amrita Devi Bishnoi is associated?
- (a) khajoor
- (b) khejrali
- (c) khejri
- (d) keekar

(b) khejrali



- 48. One of the following does not contribute in producing acid rain. This one is:
- (a) sulphur dioxide
- (b) carbon dioxide
- (c) nitrogen oxides
- (d) carbon monoxide
- (d) carbon monoxide

49. The poisonous gas which reduces the oxygen-carrying capacity of blood to a large extent is:

- (a) SO<sub>2</sub>
- (b) NO
- (c) CO
- (d) CO<sub>2</sub>

Answer

- (c) CO
- 50. Which of the following is not an ancient water harvesting structure?
- (a) kattas
- (b) sargam
- (c) kulhs
- (d) surangams

Answer

- (b) sargam
- 51. Snakes are killed in large numbers because:
- (a) they are very poisonous
- (b) they kill rats
- (c) their skin is expensive
- (d) they damage the crops

Answer

- (c) their skin is expensive
- 52. Which of the following is not a fossil fuel?
- (a) LPG
- (b) natural gas



- (c) biogas
- (d) CNG

Answer

(c) Biogas

- 53. Which of the following is not a natural resource?
- (a) soil
- (b) water
- (c) electricity
- (d) natural gas

Answer

- (c) electricity
- 54. The most rapidly dwindling natural resource in the world is:
- (a) water
- (b) soil
- (c) sunlight
- (d) forests

Answer

- (d) forests
- 55. Which of the following is not a natural resource?
- (a) snake
- (b) wind
- (c) wooden house
- (d) mango tree

Answer

(c) wooden house

56. The three R's which can 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

(d) reduce, recycle, reuse

57. The main reason for the abundant coliform bacteria in the water of river Ganga is :

(a) immersion of ashes of the dead into the river

(b) washing of clothes on the banks of river

(c) discharge of industrial wastes into the river water

(d) disposal of unburnt corpses into the river water

Answer

(d) disposal of unburnt corpses into the river water

58. The pH of a sample of water collected from a river is found to be in the range of 3.5 to 4.5. The most likely reason for this is the waste being discharged into the river from a :

(a) soap and detergent manufacturing factory

(b) car battery manufacturing factory

(c) alcohol manufacturing factory

(d) plastic cups moulding factory

Answer

(b) car battery manufacturing factory

59. Which of the following statement is incorrect?

(a) economic development is linked to environmental conservation

(b) sustainable development meets the current basic human needs and also preserves resources for future generations

(c) sustainable development does not take into consideration the viewpoints of all stakeholders

(d) sustainable development is a long-planned and persistent development

Answer

(c) Sustainable development does not take into consideration the viewpoints of all stakeholders.

- 60. Arabari forest of Bengal is dominated by:
- (a) Teak
- (b) Sal
- (c) Bamboo
- (d) Mangroove



Answer

(b) Sal

- 61. Groundwater will not be depleted due to:
- (a) process of afforestation
- (b) establishing thermal power plants
- (c) process of deforestation
- (d) cultivation of high yielding varieties of crops

Answer

(a) process of afforestation

### 62. Ahars, Kattas, Bhundhis and Khadins are the modes of:

- (a) grain storage
- (b) soil conservation
- (c) water harvesting
- (d) cold storage

Answer

- (c) water harvesting
- 63. Which of the following combination of terms has no fossil fuel?
- (a) wind, ocean, coke
- (b) kerosene, tide, wind
- (c) wood, wind, sun
- (d) petrol, wood, sun

(c) wood, wind, sun

- 64. The use of one of the following is eco-friendly. This one is:
- (a) cars for transportation
- (b) polybags for shopping
- (c) windmills for generating power
- (d) dyes for colouring clothes



Answer

(c) windmills for generating power

- 65. Khadins are used in Rajasthan to:(a) hold water for irrigation(b) recharge groundwater(c) promote soil erosion
- (d) trap wild animals

Answer

(b) recharge groundwater