

**Class: X**  
**Subject: Biology**  
**Topic: Management of Natural Resources**  
**No. of Questions: 20**

Q1. What percentage of the Earth's surface is covered with water?

- (a) 20%
- (b) 40%
- (c) 50%
- (d) 70%

Sol. (d)

Two third of the earth's surface is covered with water. To be more precise, 70.8% (71%) of the surface of the earth is water and the rest 29.2% is land. Only 3% of the earth's water is fresh water, the rest is sea water.

Q2. Billions of years ago, the degradation of biomass resulted in the formation of

- (a) Decomposers
- (b) Petroleum
- (c) Minerals
- (d) Gases

Sol. (b)

Petroleum is derived from ancient biomass (biological material derived from living organisms, e.g. wood, waste, etc). It is a fossil fuel (fuels formed by natural resources such as anaerobic decomposition of buried dead organisms) derived from ancient fossilised organic materials.

Q3. What was the objective of the Ganga Action Plan 1985?

- (a) Take care of the poor water quality of the Ganga.
- (b) Measure the distance travelled by the Ganga.
- (c) Measure the depth of the river.
- (d) Take care of the flood situation during 1985.

Sol. (a)

Ganga runs its course over 2500 kms, from Gangotri (in Himalayas) to Ganga Sagar (in the Bay of Bengal) through 29 cities. It is a river with which the people of India are attached spiritually. Department of environment, in December 1984, prepared an action plan for immediate

reduction of pollution in the river Ganga. The Cabinet approved the GAP (Ganga Action Plan) in April 1985. So, the main aim of the plan was to reduce the pollution in the river – Ganga.

Q4. Which of the following substances is discarded during the extraction of metals?

- (a) Alkali
- (b) Ore
- (c) Alloy
- (d) Slag

Sol. (d)

Mining causes pollution because of the large amount of slag, which is discarded for every tonne of metal extracted. Therefore, the correct answer is slag.

Q5. Which of the following consequences is not associated with the building of large dams?

- (a) It displaces tribals and peasants.
- (b) It contributes to deforestation
- (c) It contributes to loss of biodiversity.
- (d) It contributes to depletion of the ozone layer.

Sol. (d)

Option (1) is a problem caused by building dams. Options (2) and (3) are also the consequences of building dams. Building of dams does not have any effect on depletion of the ozone layer (ozone layer protects the earth from harmful UV radiations from the sun). Ozone layer gets depleted due to the use of chlorofluorocarbons.

Q6. In which state did the local system of canal irrigation, called Kulhs, evolve?

- (a) Himachal Pradesh
- (b) Andhra Pradesh
- (c) Punjab
- (d) Harayana

Sol. (a)

Kulhs (water dams), a traditional irrigation system in Himachal Pradesh are surface channels diverting water from natural flowing streams (Khuds). The kuhl is provided with moghas (kuchcha outlets) to draw out water and irrigate nearby terraced fields. The water would flow from field to field and the surplus water would drain back to Khud.

Q7. Which state belongs to bishnoi community?

- (a) Himachal Pradesh
- (b) Assam
- (c) Rajasthan
- (d) Chhattisgarh

Sol. (c) Bishnoi belongs to community of nature worshippers in the state of Rajasthan (India). They are also found in the neighboring states Uttar Pradesh, Madhya Pradesh, Maharashtra, Gujarat, Haryana, Punjab, Sanchole and Delhi. The sect was founded by Guru Jambheswar.

Q8. Chipko movement is also known as

- (a) Cut the tress movement
- (b) use the trees movement
- (c) Both (1) and (2)
- (d) hug the trees movement

Sol. (d) Chipko means "hugging". Chipko movement means 'trees hugging'. The movement is known for its tactic of hugging trees to prevent them being cut down and to prevent commercial timber harvesting. The modern Chipko movement was started in early 1970's in Garhwal (Himalayas of Uttarakhand) with growing awareness towards rapid cutting of trees (deforestation).

Q9. Which of the following options is neglected by mega projects like dams, canals, etc.?

- (a) pollution
- (b) Depletion of ozone layer
- (c) Local irrigation
- (d) Acid rain

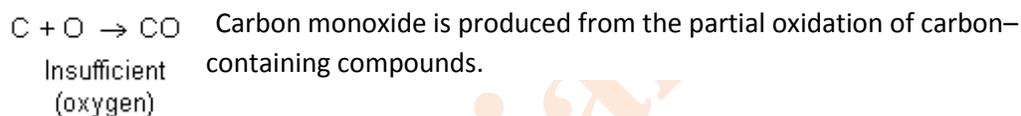
Sol. (c)

The large mega projects neglect local irrigation methods. These large scale projects (large dams and canals) were developed by Britishers and are still carried on by our independent government.

- Q10. Which of the following products is formed (instead of carbon dioxide) when combustion of fossil fuels occurs in insufficient air (oxygen)?
- (a) Carbonic acid
  - (b) Carbonate ion
  - (c) Carbon monoxide
  - (d) Carbonium ion

Sol. (c)

Fossil fuels are fuels formed by natural resources, such as anaerobic decomposition of buried dead organisms. These fuels contain high percentage of carbon and hydrocarbons, e.g. methane, petroleum, coal. When hydrocarbons (fossil fuels) burn in air, it yields carbon dioxide, water, nitrogen oxides, etc. Incomplete combustion occurs when there is not enough oxygen to allow the fuel to react completely with the oxygen to produce carbon dioxide and water.



Therefore, the correct answer is carbon monoxide.

- Q11. Which of the following things cannot be recycled?
- (a) Plastic
  - (b) Paper
  - (c) Electricity
  - (d) Metal

Sol. (c) Law of conservation of energy states that "energy can neither be created nor be destroyed". Also, electricity is a form of energy. So, it cannot be created but can be changed from one form to another.

- Q12. Amrita Devi sacrificed her life in 1731 while protecting\_\_\_\_\_.
- (a) Tress
  - (b) Animals
  - (c) Children
  - (d) Land

Sol. (a)

In 1731, Amrita Devi Bishnoi sacrificed her life to protect the Khejri trees in Khejarali village in Jodhpur district of Rajasthan. 363 other people were also killed defending the trees. Amrita Devi protested against King's men attempting to cut green trees as it was prohibited in Bishnoi religion. The Government of India has recently instituted "Amrita Devi Bishnoi National Award for Wild life conservation" in her memory.

So, correct answer is option (1).

Q13. Which of the following trees recovery is associated with the Arabari forest range?

- (a) Sal
- (b) Mango
- (c) Pine
- (d) Apple

Sol.

(a)  
Arabari forest range is the name of forest range in west Midnapore district of West Bengal (India). The predominant tree of the forest is Sal (*Shorea robusta*). This tree is an important source of hardwood timber. Sal is moderate and slow growing. In wet areas, it is evergreen; in dry areas, it is a dry season tree, shedding most of the leaves between February and April, leafing out again in April and May. At Midnapore, forest officer A.K. Banerjee and villagers were involved in the protection of 1,272 hectares of badly degraded Sal forest.

Q14. We need to manage our resources because they are \_\_\_\_.

- (a) Limited
- (b) Harmful
- (c) Expensive
- (d) Both 1 and 2

Sol.

(a)  
Natural resources are derived from environment. Many of them are essential for our survival while others are used for satisfying our desires.

#### Division of Resources

(1) On the basis of origin

<b>Biotic</b>	<b>Abiotic</b>
Resources obtained from biosphere - animals, birds, fish, coal and petroleum	Comprise of non-living things - land, water, minerals (gold, iron etc)

(2) On the basis of renewability

<u>Renewable resources</u>	<u>Non-Renewable sources</u>
These resources can be reused or replenished, e.g. sunlight, air, wind etc.	These resources cannot be reused or replenished, .e.g. minerals and fossils. They cannot be replenished if they are once depleted. So, the resources are limited.

(2) and (4) cannot be the answers as resources are not harmful.

Option (3) is not the answer as this is a secondary issue.

(1) is the answer because non-renewable sources are depleting day by day and they cannot be replenished. Therefore, they are limited.

Q15. Which of the following statements is associated with the Tawa dam?

- (a) It could not be used to store water.
- (b) Its oustees are still fighting for the benefits they were promised.
- (c) It is still unbuilt due to people's protests.
- (d) It could not produce electricity.

Sol. (b)

Tawa Dam is located at the joining of Tawa river and Denwa river, in Hoshangabad district, Madhya Pradesh. It was built in 1978. It was mainly built for irrigation purpose. This dam irrigates a large area of Hoshangabad district.

Option (2) is correct. Construction of such dams displaces large number of peasants and tribals, which stay nearby. Also, poor tribals who do not get any benefits from these projects are alienated from their lands without adequate compensation. The oustees of the Tawa Dam are still fighting up for the benefits they were promised.

Q16. Which of the following statements about water stored in the ground is not correct?

- (a) It does not evaporate.
- (b) It spreads out to recharge wells
- (c) It provides moisture for vegetation.
- (d) It provides breeding grounds for mosquitoes.

Sol. (d)  
Option (4) is correct.

Q17. The regions of water scarcity closely co-relate with \_\_\_\_\_.

- (a) availability of resources
- (b) high precipitation
- (c) prosperity
- (d) acute poverty

Sol. (d)  
Water is essential for all socio-economic development and healthy ecosystems. As population is increasing, the requirement is also increasing. Imbalances between the availability and demand, the degradation of ground water and surface water all contribute to water scarcity. First and foremost, water scarcity is an issue of acute poverty. So, correct answer is acute poverty.

Q18. For how long the available coal resources are expected to last?

- (a) 40 years
- (b) 100 years
- (c) 200 years
- (d) 500 years

Sol. (c)  
Coal is readily combustible black or brownish black fuel. It is composed primarily of carbon along with variable quantities of other elements, chiefly sulphur, hydrogen, oxygen and nitrogen. It is a fossil fuel, and is the largest source of energy for the generation of electricity worldwide. Coal reserves cannot be replenished if they are depleted once. World coal reserves will last 200 years at current consumption rate.

Q19. A person repairs the leaky taps in order to save water. Under which of the following terms will his work come?

- (a) Reduce
- (b) Recycle
- (c) Reuse
- (d) Regenerate

Sol. (a)  
Reduce means to limit the use of resources.

Q20. In which of the following fields is Amrita Devi Bishnoi National Award given?

- (a) Science
- (b) Social work
- (c) Medicine
- (d) Wildlife conservation

Sol. (d)  
Option (4) is correct.