

## **18. Ecosystem**

### **Practice Questions**

**Q 1) Write notes on -**

#### **1. Decomposers.**

**Ans:** The organic substances such as carbohydrates, proteins and lipids from the dead bodies of plants and animals are converted into inorganic substances by microorganisms. Therefore, microbes are said to be decomposers. Inorganic substances means hydrogen, oxygen, calcium, iron, sodium, potassium, etc. The organic substances are stuck in the dead bodies of plants and animals. The decomposition of that dead bodies is carried out by microorganisms. Due to this action, the components such as hydrogen, oxygen, calcium, nitrogen, sodium, iron, potassium are released. So the bacteria are also called as decomposers.

#### **2. Grassland Ecosystem**

**Ans:** Grasslands develop where rainfall is insufficient to grow big trees. Large amount of grass is found in these ecosystems. Longer summer and limited rain develop dwarf plants in these areas. Animals like goat, sheep, giraffe, zebra, elephant, deer, chital, tiger, lion, etc. are found in this ecosystem. Similarly various birds, insects, microbes are also present.

#### **3. Marine Ecosystems**

**Ans:** Marine plants grow in these ecosystems. Shallow water contains small fishes, prawns feeding on algae. The central part of sea has less number of aquatic living organisms. Large fishes are secondary consumers. Ocean has a large amount of nutrients. The bottom of oceans has more amount of decomposers. Dead bodies of plants and animals, waste materials are decomposed by bacteria.

#### **4. Sanctuaries**

There are around 520 sanctuaries and 92 national parks in India. Many ecosystems are conserved in these national parks. 1. The Great Himalayan National park is the largest sanctuary where white panther, a rare species is conserved. 2. Elephants, wild boars, wild buffaloes, deers, tigers, panthers are conserved at Kaziranga (Assam.. Two third of the total number of single horned rhinos in the world is found at kaziranga.3. The sanctuary at Bharatpur is famous for aquatic birds.4. Ranthambore sanctuary is famous for tigers.5. Gir forest in Gujrat is the only habitat/ shelter for the spectacular Asiatic lion.

## 5. Desert Ecosystem

**Ans:** Each components in ecosystem live by optimizing/ condition. The leaves of cactus plant in desert are converted into horny spines for optimization. Since there is less water, trees in desert do not have branches. Their foliage is on the top. Therefore, the evaporation decreases. Also, the camel is also adapted to ecosystem. Its stomach does not heat when sand is heated due to its long feet/ legs. It has the capacity to store water in the body. It can easily walk in sand due to its flat and wide feet.

**Q 2) Write the answers of the following questions.**

### 1. Explain the symbiosis in ecosystem with examples.

**Ans:** The different types of living symbiosis lives in ecosystem. They have close relationships with each other. They live cooperative life so they are called symbiosis and living organisms are called symbiotic. Ex. 1. Lichen is symbiotic association of fungus and algae. Algae prepare food and fungus gives moisture to them by storing water. 2. The symbiosis is found in termite and trichonympha. Trichonympha lives in the intestine of termite and digest the food eaten by termite. So trichonympha gets protection for survival. 3. The ants live in the thorn of babul plant. 4. The rhizobium bacteria lives in the roots of peas and green gram.

### 2. Explain the parasite in ecosystem with examples.

**Ans:** The different types of living parasites lives in ecosystem. In parasite, one living organism get benefit while another get harmed. The living organism which get benefit is called as parasite while those get harmed are called as feeder/ host. Ex. 1. Dodder plant grows on the mango and baubinia variegated trees. 2. Bamboo plants grows in the root of tobacco plant. It gets the food from tobacco plant and after sometime the plant gets destroyed. 3. Some worms grow in the human intestine. which leads to suffering from various diseases.

### 3. How the Industrialization and traffic causes destruction to ecosystem?

**Ans:** Raw materials required for industrialization are obtained by destroying forests. This results in destruction of natural habitat and forests. In the same way, to provide the amenities for increased traffic, many times roads and railway are built through forests and wetlands and causes destruction to the natural habitat in large amount.

### 4. How the ecosystems formed in running water get destroyed?

**Ans:** Dams cover vast lands. So the forests or grassland in that area get converted into aquatic ecosystems. Dams also lessen the water current in lower area. Therefore the previous ecosystems in that running water get destroyed.

Q 3) Write the reasons.

1. In ecosystem, the role of living organism is called ‘Niche’.

Ans: Every living organism in an ecosystem plays a particular role while living, moving in that ecosystem. The position of any living organism in context to other living organisms and the role it is playing is called ‘Niche’.

2. Microbes are said to be ‘Decomposers’.

Ans: The organic substances from dead bodies of plants and animals are converted into inorganic substances by microorganisms. Therefore, Microbes are said to be ‘Decomposers’.

Q 4) Write the names.

1. Write two names of the producers from grasslands.

Ans: Kusali, Parthenium

2. Tertiary consumers of forest.

Ans: Tiger, Falcon, Cheetah

Q 5) Write the difference in Ranthambore sanctuary and Bharatpur sanctuary.

Ranthambore sanctuary	Bharatpur sanctuary
There are striped tigers in Ranthambore sanctuary.	There are aquatic birds in Bharatpur sanctuary.

Q 6) Identify the different term.

1. Proteins, Carbohydrates, Lipids, Hydrogen

Ans: Hydrogen (this is inorganic substances and others are organic substances.)

2. Deserts, Grasslands, Iceland ecosystem, Creek ecosystem

Ans: Creek ecosystem (this is aquatic ecosystem and other are land biomes.)

Q 7) Identify the correlation.

1. \_\_\_\_\_ : Primary consumers: : Plants: Producers

Ans: Frog

2. \_\_\_\_\_: Fresh water ecosystem: : Fourfinger threadfin: Creek ecosystem

Ans: Rohu, Catla

Q 8) Write whether the following statements are true or false.

1. Each place has a different ecosystem.

Ans: True

2. The distribution of abiotic factors is the same on the earth surface.

Ans: False (The distribution of abiotic factors is different on the earth surface.)

3. Dudhwa forest is famous for single horned Rhino.

Ans: True

4. Grasshopper is secondary consumer.

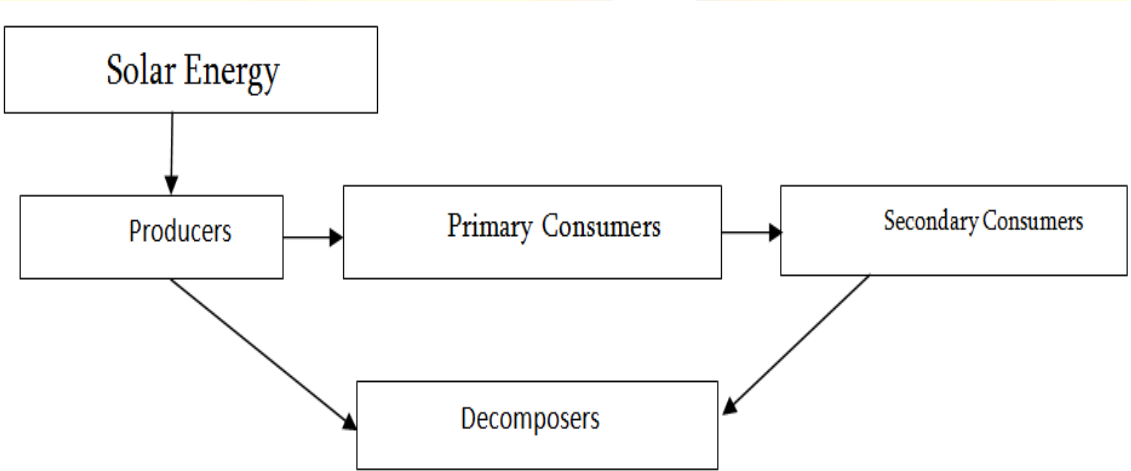
Ans: False (Grasshopper is Primary consumer.)

5. Amenities created for tourist in sacred places causes diminishment of ecosystem.

Ans: True

Q 9) Prepare a chart.

1. The food chain in the ponds.



**Q 10) Write down the National Parks given below in which state and district.**

**1. Pench National Park**

**Ans: Pench National park is located in Nagpur district in Maharashtra state.**

**2. Bandipur National Park**

**Ans: Bandipur National Park is located in Mysore city in Karnataka state.**

**3. Bharatpur National Park**

**Ans: Bharatpur National Park is located in Bharatpur city in Rajasthan.**

**4. Bannerghatta National Park**

**Ans: Bannerghatta National Park is located in Bangalore city in Karnataka state.**

**5. Guindy National Park**

**Ans: Guindy National Park is located in Chennai city in Tamil Nadu state.**

**Q 11) Write definition of following.**

**1. Producers**

**Ans: The green plants produce food so they are called as producers.**

**2. Primary consumers**

**Ans: The living organisms like fish, frog, insects, etc. live on green plants so they are called as Primary consumers.**

**3. Secondary consumers**

**Ans: The living organisms which live on primary consumers are called as Secondary consumers.**

**4. Habitat**

**Ans: The place where the living organism live and develop are called as habitat.**

**5. Ecosystem**

**Ans: Living organisms and their habitat, environment are correlated with each other. The structure which is formed due to these reciprocal relationships is called an ecosystem.**