Class - 8

Sub. - Biology

Chapter - 4

ECOSYSTEM

---BOOKWORK---

Objective type questions:

A. Choose the correct option.

1. Which of the following is not an abiotic component?

Ans.- b. Light

2. Which of the following headings does flea come under?

Ans.- a. Parasite

- 3. Which of the following constitute a food chain?
 Ans. -b. Grass, Goat and Human
- 4. Which of the following is also known as autograph?

Ans.- a. Producer

5. Which of the following is an example of herbivore ?

Ans.- c. Grasshopper

6. In a food chain, the third trophic level is always occupied by :

Ans.- a. carnivores

B. Fill in the blanks:

- 1. The environment that deals with the interrelationship of living things with one another and their environment ecology.
- 2. All animals are called **consumer** as their food requirements are met by feeding on plants or other organisms.
- 3. The network of food chain is called a food web.
- 4. Tiger and lion are tertiary consumers.
- 5. In nature, all green plants are producers whereas animals are consumers.
- 6. A series of organism, each of which feeds on the next organism, the beginning of which is a green plant, is called a Food chain.

C. Write T for true and F for false:

- 1. Autotrophs cannot make their own food. F
- 2. Omnivores feed on the flesh of dead animals. F
- 3. Scavengers help in keeping the environment clean. T
- 4. Fungi is an example of a decomposer. T
- 5. Plants and animals are not dependent on each other. F

-----Copy Work-----

Subjective type questions:

D. Answer the following questions in short:

1. Explain food chain, giving suitable examples.

Ans. - A series of organism ,each dependent on the next as a source of food. Eg. Plant→mice →snake→ hawk

- 2. What is ecosystem?
- Ans. The interaction of all the living organisms in given area, along with the non-living components in their environment.
- 3. What role does flora play in a forest ecosystem?

Ans. - a. flora maintain the natural forest ecosystem.

- b. All animals depend on flora for their food.
- c. All plants give out oxygen required for respiration in all living organisms.
- d. Flora provide shelter to most of the animals in forest.
- 4. Write a short note on host-parasite relationship. Ans. -It is an on mutual relationship between species where one species (parasite) benefits at the expense of the other(host). eg. Fleas on dog.
- 5. Give reson for the parasitism as a non-mutual relationship.
- Ans. -Parasitism is non mutual relationship because in this interaction the species smaller in size (parasite) lives

in or on the larger species called the host, parasite gets the food from the host but host do not get any benefit.

E. Answer the following questions in details.

- 1. Write in detail about the interaction within biotic components of environment and energy flow.

 Ans. Producers are the original source of all food all the organisms depend upon green plants for food, for example the grass is eaten up by deer and deer is then eaten up by the lion. Here grass is producer that prepare food by the process of photosynthesis, this grass is consumed by herbivores called deer and deer is consumed by carnivorous called lion and this is how biotic components interact with each other and these
- 2. List and explain the abiotic components of an ecosystem.

organism do so to transfer the food energy.

- Ans. The abiotic components of an ecosystem are non-living components. -
- a. sunlight
- b. Air
- c. Water
- d. Humidity
- e. Soil

f. Temperature

3. Explain the forest ecosystem in detail.

Ans. - All forest ecosystem consist of the community of plants, animals and all other microorganisms in interaction with chemical and physical environment components like soil, air, water etc. biotic components include trees, shrubs and other ground vegetation, animals such as beetles grasshopper are primary consumers or herbivores. Snake, lizard etc are secondary consumers. Top consumers such as lion tiger etc.

Decomposers include fungi and bacteria.

4. What is the difference between predation and parasitism?

Ans. - Predation is a biological interaction where predator(an organism that is hunted)feeds on its prey(the organism that is attacked).

Parasitism is a non mutual relationship between species, where one species the parasite benefits at the expense of the other, the host. The parasite lives in or in the host.