Chapter- 15

OUR ENVIRONMENT

Sub-Topic Name: Environment, Ecosystem, Components and function of an ecosystem.

Period-1

Level-1

1 Mark Questions

Easy-Very Short Answers

- 1. Name two aquatic ecosystems.
- 2. Name two terrestrial ecosystems.
- **3.** Give two examples of Artificial ecosystems.
- **4.** Which is the ultimate source of the energy for an ecosystem?
- 5. Name the category of organism which feed the energy into the ecosystems.
- **6.** Give the scientific term for organisms which feed directly on plants.

Level-2

2 Marks Questions

Medium

- 1. What are the differences between biodegradable and non-biodegradable wastes.
 What is Ecosystem? What are the different types of Ecosystem?
- 2. Why does aguarium have to be cleaned once in a while?
- 3. Do we have to clean ponds or lakes in the same manner of aquarium? Why or why not?
- **4.** What are the different components of echo system?
- **5.** What are trophic levels? Give an example of a food chain and state the different trophic levels in its.
- **6.** What is the role of decomposers in the ecosystem?

<u>Level-3</u> 3 Marks Questions

- 1. What is the role of bacteria and fungi in an ecosystem?
- 2. What are trophic levels?
- 3. How much energy is transferred to the next trophic level in a food chain?
- 4. Which trophic level has the highest concentration of toxic substances in a food chain?
- 5. Mention some sources of CFC's.
- 6. Distinguish between a food chain & a food web.

Level-4

5 Marks Questions

HOTS Questions

- 1. What would happen if the balance of nature is disturbed?
- 2. How can you say that the ecosystem is dynamic?
- 3.why does an ecosystem attain a state of equilibrium?
- 4. state the significance of law of Conservation of energy and law of entropy in an ecosystem.
- 5. why is ecosystem self regulatory by nature?

Period-2

Sub-Topic Name: food chain, food web, trophic level, 10% law

Level-1

1 Mark Questions

Easy-Very Short Answers

- 1. What are the different components of echo system?
- 2. What are trophic levels? Give an example of a food chain and state the different trophic levels in its.
- 3. What is the role of decomposers in the ecosystem?
- **4.** What are the importance of decomposers?
- 5. What is a food chain?
- **6.** What is food web?

Level-2

2 Marks Questions

Medium

- 1. What is a food chain? Write a five step food chain found in grass land with frog as one of themembers. What will happen to organisms at different trophic levels if all the frogs are removed?
- 2. What are the problems caused by the non-biodegradable wastes that we generate?
- 3. Food chains generally consist of only 3 or 4 trophic levels. Why is it so?
- 4. Observe the food chain Plant (1000 kJ) --- > Goat ---> Lion (a) If autographs occupying the firsttrophic level are called producers what are herbivores Called as? (b) How much energy does the lion get in the above food chain?

- 1. Distinguish between a food chain & a food web
- 2. What would happen if there are no decomposers on earth?
- 3. What is a food chain? Write a five step food chain found in grass land with frog as one of the members. What will happen to organisms at different trophic levels if all the frogs are removed?
- **4.** The number of malaria patients increased tremendously when a large number of frogs were exported from the village .What could be the cause for it? Explain with the help of a food chain.
- 5. What are the problems caused by the non-biodegradable wastes that we generate?

Level-4 5 Marks Questions

HOTS Questions

- 1. what is a food chain? Illustrate the concept if grass land ecosystem
- 2. How is a food web created in the nature? Construct a food web and describe the concept.
- 3. Describe the unidirectional flow of energy in an ecosystem.

Period-3

Level-1

Sub-Topic Name: pyramid of biomass, pyramid of number, biomagnification

Easy-Very Short Answers

- 1. First order consumers are:
 - (a) Carnivores
 - (b) Herbivores
 - (c) Decomposers
 - (d) Omnivores
- 2. A detritus food chain begins with
 - (a) Carnivores
 - (b) Herbivores
 - (c) Omnivores
 - (d) Decomposers
 - 3. In an ecosystem, the 10% of energy disposable for transfer from one trophic level tonext is in the form of
 - (a) heat energy
 - (b) chemical energy
 - (c) mechanical energy
 - (d) light energy
 - 4. What is Biomagnification?
 - 5. What is food pyramid?
 - 6.what is biomass?

1 Mark Questions

Medium

- 1. Suggest activities in our daily life which are eco friendly.
- 2. How can you help in reducing the problem of waste disposal? Give any two methods.
- 3. What is the importance of phytoplankton?
- 4. Which pollutants are contributed by airplanes?

Level-3 3 Marks Questions

- 1. What is biological magnification.? Explain with examples.
- 2. Can an ecosystem survive without producers?
- 3. What is pyramid of numbers, biomass and energy?

Level-4 5 Marks Questions

HOTS Questions

1. What do you understand by the term biological magnification? .Explain the processby taking DDT as an example

Period-4

Sub-Topic Name: Human activities and environment, ozone layer formation, depletion, managing garbage we produce.

L<u>evel-1</u>

1 Mark Questions

Easy-Very Short Answers

- 1. What happens when we add our waste to the environment or throw?
- 2. What are the different types of waste materials?
- 3. What happens after we throw waste away them away?
- 4. Why are some substances biodegradable and some non-biodegradable?
- 5. What are the harmful effects of biodegradable substance?
- **6.** What are the harmful effects of non-biodegradable substance?
- 7. Name some of the biodegradable plastics.
- **8.** What are the differences between biodegradable and non-biodegradable wastes. What is Ecosystem? What are the different types of Ecosystem?

Level-2

2 Marks Questions

Medium

- 1. When is World Ozone Layer Preservation Day celebrated?
- 2. What is green house effect?
- 3. Suggest activities in our daily life which are eco friendly.
- **4.** How can you help in reducing the problem of waste disposal? Give any two methods.
- 5. What is the importance of phytoplankton?
- **6.** Which pollutants are contributed by airplanes?
- 7. How is ozone layer formed in the atmosphere? What is the function of this layer?
- 8. Name any two biodegradable wastes.
- 9. Name any two non-biodegradable wastes.

- 1. Why is damage to the ozone layer a cause of concern? What steps are being taken tolimit this damage?
- 2. Which compounds are responsible for the depletion of ozone layer?
- 3. Which disease is caused in human being due to depletion of ozone layer in the atmosphere?
- **4.** Why is ozone layer getting depleted at higher levels of the atmosphere?
- **5.** How is ozone formed in the upper atmosphere? Which compounds are responsible for the depletion of ozone layer?

Level-4

5 Marks Questions

HOTS Questions

- 1. Name the radiation absorbed by the ozone layer. What would happen to living beings on earth if theozone around us disappears? How can we prevent ozone depletion?
- 2. Damage to the ozone layer is a cause for concern. Justify this statement. Suggest any two steps to limitthis damage.
- 3What is a biodegradable waste? If all the waste we generate is biodegradable, what impact may this haveon the environment?
- 4. why is ozone layer getting thinner day by day? What are its harmful consequences?
- 5. write about the different types of wastes and their adverse effects on the environment in details.