

Practical No. 5

Aim : Comparative study of ecosystems in the surroundings.

Apparatus : Note book, pen, pensil, old newspapers etc.

Procedure :

1. Select any two different ecosystems in 1 SqKm area around your home or school. Eg. pond, meadow, garden, large trees like banyan, peepal, tamarind, mango, agricultural farm etc.
2. Note down abiotic factors found in them.
3. Collect the samples of plants with different sizes and types. Keep seedlings or branches of plants in folds of old newspapers and dry them properly. Make a scrap book from these herbarium sheets.
4. Note down the names of animals found in both the ecosystems. Collect their diagrams/photos.
5. Find out the differences between the biotic factors in both the ecosystems. Find out the reasons.

Observations :

Sr.	Name of the ecosystem	List of biotic factors	List of abiotic factors
1	Pond ecosystem	Fish, grass, insects	water, stones,
2	Paddy ecosystem	Grosshopper, frog,	sand, air, light.
3			
4			

Other important notes :

1. There are many biotic factors who effect the ecosystem.
2. abiotic factors are also important.
3. Now, ecosystems are in danger.
4. ecosystem can not grow without the intraction of biotic and abiotic factors in ecosystem.

Inference / Conclusion

Ecosystem is the basic function unit used to study the ecology. The interactions of abiotic and biotic factors are necessary for ecosystem. every factors or element in ecosystem are important for ecosystem.

Many ecosystem come together to form food chain.

Multiple Choice Questions

1. Butterfly is a consumer.
☒ a. primary b. secondary c. tertiary d. none of these
2. of the following is omnivorous.
a. Cow b. Grasshopper c. Worm d. Sparrow
3. Food web contains many
☒ a. primary consumers. b. secondary consumers. c. tertiary consumers. d. food chains.
4. Autotrophic plants are at the level of food chain.
a. tertiary nutrition b. secondary nutrition ☒ c. producers d. highest
5. Man is animals.
a. herbivorous b. carnivorous c. autotrophic ☒ d. omnivorous

: Exercise :

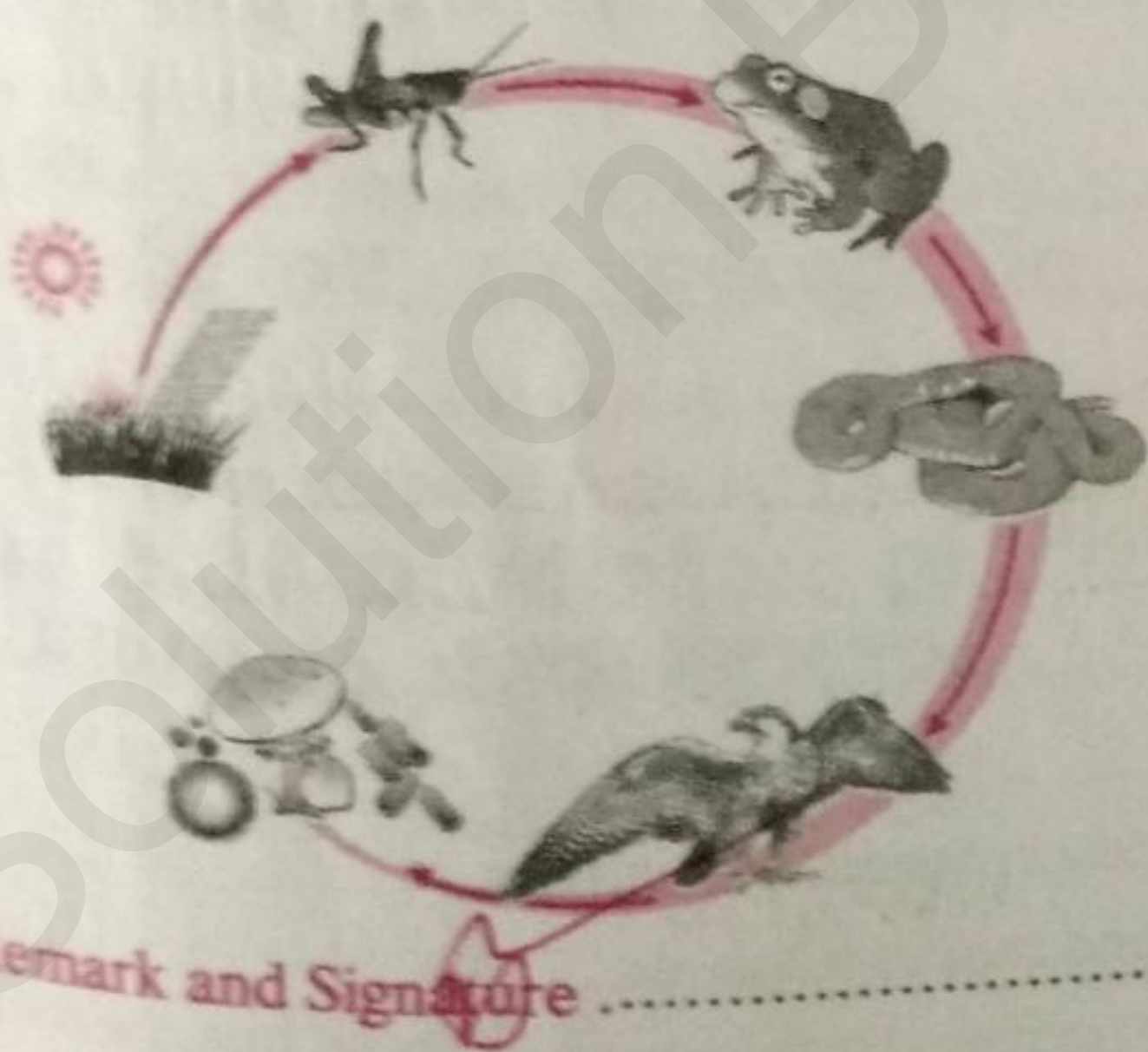
1. Find out in the past if there were some biotic and abiotic factors in the ecosystems you have selected. But now they are not found. If this is the situation, find out the reasons for their diminution.

biotic factors :- Dinosaur, Dodo birds, Indian leopards
Reason :- There are many reasons for extinction of biotic factors like natural disaster (volcanic activity), deforestation, hunting, etc.
at all, the biotic factor will play a very important role in our daily life.

2. Did you find any examples of human interference in these ecosystems?

Yes, I find many human interference in these ecosystems, such as deforestation, hunting of animals, urbanisation, pollution and industrialization. Many factors are affected by this interference of humans.

3. What is the relation with ecosystem of figure shown below?



In this diagram, plants receive their energy from the sun. Then the grasshopper depends on them, and this chain starts continuously from frog, snake, eagle to decomposer. This is a food chain.



Remark and Signature