

BIOLOGY

BOOKS - PREMIERS PUBLISHERS

ECOSYSTEM

Evaluation Textbook Questions Answers

1. Which of the following is not a abiotic component of the ecosystem?

A. Bacteria

B. Humus

C. Organic compounds

D. Inorganic compounds

Answer: A



Watch Video Solution

2. Which of the following is / are not a natural ecosystem?

A. Forest ecosystem

B. Rice field

C. Grassland ecosystem

D. Desert ecosystem

Answer: B



Watch Video Solution

3. Pond is a type of

- A. forest ecosystem
- B. grassland ecosystem
- C. marine ecosystem
- D. fresh water ecosystem

Answer: D



Watch Video Solution

4. Pond ecosystem is

- A. not self sufficient and self regulating
- B. partially self sufficient and self regulating
- C. self sufficient and not self regulating
- D. self sufficient and self regulating

Answer: D



Watch Video Solution

5. Profundal zone is predominated by heterotrophs in a pond ecosystem, because of

A. with effective light penetration

B. no effective light penetration

C. complete absence of light

D. both (a) and (b)

Answer: B



Watch Video Solution

6. Solar energy used by green plants for photosynthesis is only

A. 2 - 8%

B. 2 - 10%

C. 3 - 10%

D. 2 - 9%

Answer: B



Watch Video Solution

7. Which of the following ecosystem has the highest primary productivity?

A. Pond ecosystem

B. Lake ecosystem

C. Grassland ecosystem

D. Forest ecosystem

Answer: D



Watch Video Solution

8. Ecosystem consists of

A. decomposers

B. producers

C. consumers

D. all of the above

Answer: D



Watch Video Solution

9. Which one is in descending order of a food chain?

A. Producers → Secondary consumers → Primary consumers → Tertiary consumers

B. Tertiary consumers → Primary consumers → Secondary consumers → Producers

C. Tertiary consumers → Secondary consumers → Primary consumers → Producers

D. Tertiary consumers → Producers → Primary consumers → Secondary consumers

Answer: C



Watch Video Solution

10. Significance of food web is / are

A. it docs not maintain stability in nature

B. it shows patterns of energy transfer

C. it explains species interaction

D. both b and c

Answer: D



Watch Video Solution

11. Which of the following is / are not the mechanism of decomposition?

A. Eluviation

B. Catabolism

C. Anabolism

D. Fragmentation

Answer: C



Watch Video Solution

12. Which of the following is not a sedimentary cycle?

A. Nitrogen cycle

B. Phosphorous cycle

C. Sulphur cycle

D. Calcium cycle

Answer: A



Watch Video Solution

13. Which of the following are not regulating services of ecosystem services?

i) Genetic resources

ii) Recreation and aesthetic values

iii) Invasion resistance

iv) Climatic regulation

A. (i) and (iii)

B. (ii) and (iv)

C. (i) and (ii)

D. (i) and (iv)

Answer: C



Watch Video Solution

14. Productivity of profundal zone will be low Why?



Watch Video Solution

15. Discuss the gross primary productivity is more efficient than net primary productivity.



[Watch Video Solution](#)

16. Pyramid of energy is always upright. Give reasons.



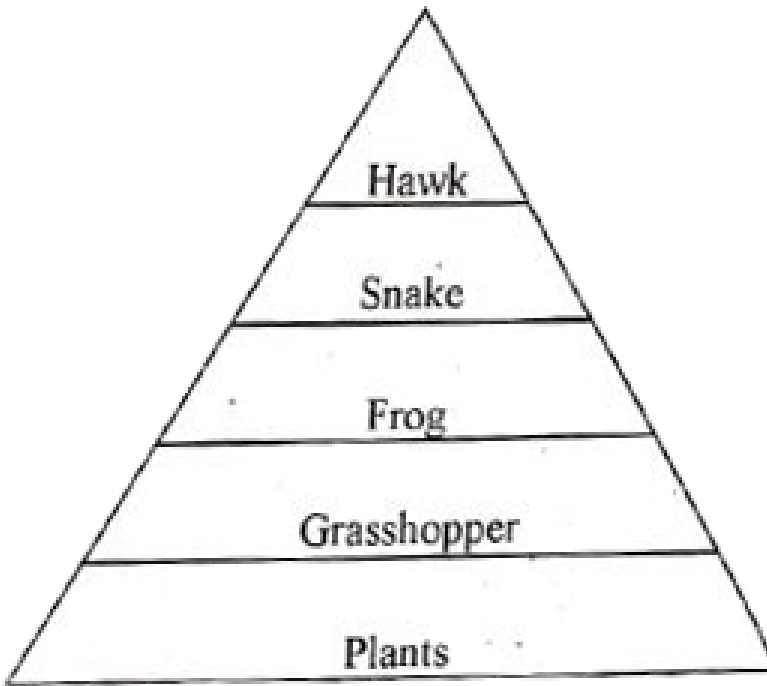
[Watch Video Solution](#)

17. What will happen if all producers are removed from ecosystem?



[Watch Video Solution](#)

18. Construct the food chain with the following data.



[Watch Video Solution](#)

19. Name of the food chain which is generally present in all type of ecosystem. Explain and write their

significance.



[Watch Video Solution](#)

20. Shape of pyramid in a particular ecosystem is always different in shape. Explain with example.



[Watch Video Solution](#)

21. Generally human activities are against to the ecosystem, where as you a student how will you help to protect ecosystem?



[Watch Video Solution](#)

22. Generally in summer the forest are affected by natural fire. Over a period of time it recovers itself by the process of successions. Find out the types of succession and explain.



Watch Video Solution

23. Draw a pyramid from following details and explain in brief. Quantities of organisms are given-Hawks-50, plants-1000.rabbit and mouse-250 + 250, pythons and lizard - 100 + 50 respectively.



Watch Video Solution

24. Various stages of succession are given bellow. From that rearrange them accordingly. Find out the type of succession and explain in detail.

Reed-swamp stage, phytoplankton stage, shrub stage, submerged plant stage, forest stage, submerged free floating stage and marsh meadow stage.



Watch Video Solution

Other Important Questions Answers Choose The Correct Answers 1 Mark

1. Match the following,

- | | |
|--------------------|---------------------------------|
| (p) Standing state | (i) Green algae |
| (q) Abiotic | (ii) Herbivore |
| (r) Autotroph | (iii) Proteins |
| (s) Heterotroph | (iv) Total inorganic substances |

A. (p)-(iv), (q)-(iii), (r)-(H): (s)-(i)

B. (p)-(iv), (q)-(iii), (r)-(i): (s)-(ii)

C. (p)-(ii): (q)-(i), (r)-(iv), (s)-(iii)

D. (p)-(iii): (q)-(iv): (r)-(ii), (s)-(H)

Answer: B



Watch Video Solution

2. Match the following.

- | | |
|------------------------|---------------|
| (p) Primary producers | (i) Lion |
| (q) secondary consumer | (ii) Elephant |
| (r) Primary consumer | (iii) Snake |
| (s) Tertiary consumer | (iv) Trees |

A. (p)-(iv): (q)-(iii), (r)-(ii), (s)-(i)

B. (p)-(iv), (q)-(iii): (r)-(i), (s)-(ii)

C. (p)-(ii), (q)-(i), (r)-(iv), (s)-(iii)

D. (p)-(iii), (q)-(iv), (r)-(i), (s)-(ii)

Answer: A



Watch Video Solution

3. Match the following.

- (p) Charles Elton (i) Karl Mobius
(q) Lindeman (ii) S.A.Forbes
(r) Biocoenosis (iii) Ecological pyramid
(s) Microcosm (iv) Ten percent law

A. (p)-(iv), (q)-(iii), (r)-(ii), (s)-(i)

B. (p)-(iv), (q)-(iii): (r)-(i), (s)-(ii)

C. (p)-(iii), (q)-(iv), (r)-(i), (s)-(ii)

D. (p)-(ii), (q)-(i): (r)-(iv), (s)-(iii)

Answer: C



Watch Video Solution

4. Match the following.

- (p) Provisional services (i) Ecotourism
(q) Cultural services (ii) Seed dispersal
(r) Supporting services (iii) Genetic resources
(s) Regulating services (iv) Water cycling

A. (p)-(iv), (q)-(iii): (r)-(iii), (s)-(i)

B. (p)-(ii), (q)-(i), (r)-(iv), (s)-(iii)

C. (p)-(iv): (q)-(iii), (r)-(i), (S)-(H)

D. (p)-(iii), (q)-(i), (r)-(iv), (s)-(ii)

Answer: D



Watch Video Solution

5. Match the following.

- (p) Hydrosphere (i) Adequate moisture
(q) Mesosphere (ii) Ponds
(r) Lithosphere (iii) Saline water
(s) Halosphere (iv) Barron rock

A. (p)-(ii), (q)-(i), (r)-(iv), (s)-(iii)

B. (p)-(iv), (q)-(iii), (r)-(ii), (s)-(i)

C. (p)-(iv), (q)-(iii), (r)-(i), (s)-(ii)

D. (p)-(iii), (q)-(iv), (r)-(ii), (s)-(i)

Answer: A



Watch Video Solution

6. Which of the following is not a biotic factor?

A. Bacteria

B. Fungi

C. Carbohydrate

D. Algae

Answer: C



Watch Video Solution

7. Which of the following is an omnivore?

A. Eagle

B. Crow

C. Rabbit

D. Hawk

Answer: B



Watch Video Solution

8. Movement of decomposed, water soluble organic and inorganic compounds from surface to lower layer of soil _____.

A. Eluvation

B. Filtration

C. Sublimation

D. Diffusion

Answer: A



Watch Video Solution

9. Gaseous cycle in the atmosphere includes:

A. Ammonia, oxygen and methane cycle

B. Oxygen, nitrogen and ammonia cycle

C. Oxygen, carbon and nitrogen cycle

D. Carbon dioxide, nitrogen and methane cycle

Answer: C



Watch Video Solution

10. Identify the regulating service of ecosystem:

- A. Nutrient cycle
- B. Erosion
- C. Education value
- D. Medicines

Answer: B



Watch Video Solution

11. Choose the odd man out:

A. Vernadsky

B. Karl Mobius

C. Watson

D. Friederichs

Answer: C



Watch Video Solution

12. Find out the odd one out:

A. Mouse

B. Deer

C. Elephant

D. Tiger

Answer: D



Watch Video Solution

13. Indicate the odd one out:

A. Fragmentation

B. Infiltration

C. Catabolism

D. Humification

Answer: B



Watch Video Solution

14. Choose the odd one out:

A. Forest

B. Pond

C. Maize field

D. Lentic

Answer: C



Watch Video Solution

15. Identify the odd one out:

A. Water cycling

B. Seed dispersal

C. Pest regulation

D. Water purification

Answer: A



Watch Video Solution

16. Which of the following is a correct pair?

Column-1	Column-II
(a) Constanza	Pyramids
(b) Charles Elton	Ecology services
(c) tansley	Ecosystem
(d) Odum	Microcosm



Watch Video Solution

17. Find out the incorrect pair.

Column -1	Column - II
(a) Bacteria	Biotic
(b) Humic substances	Abiotic
(c) Nucleic acids	Biotic
(d) Lipids	Abiotic



Watch Video Solution

18. Choose the correct pair.

- | Column -1 | Column - II |
|--------------|---------------|
| (a) Crow | Carnivore |
| (b) Elephant | Herbivore |
| (c) Tiger | Omnivore |
| (d) Frog | Top carnivore |



[Watch Video Solution](#)

19. Identify the incorrect pair:

- | Column -1 | Column - II |
|------------------|--|
| (a) Grey carbon | Coal |
| (b) Black carbon | Diesel engine |
| (c) Blue carbon | Oceans |
| (d) Green carbon | Carbon stored in industrialized forest |



[Watch Video Solution](#)

20. Which of the following is the correct pair?

Column -1

Column - II

- | | |
|----------------------|---------------------|
| (a) Lotic ecosystem | Pond |
| (b) Lentic ecosystem | River |
| (c) Terrestrial | Grassland ecosystem |
| (d) National park | Natural ecosystem |



[Watch Video Solution](#)

21. Assertion: In most ecosystems, green plants are autotrophs.

Reason: They have chlorophyll, which enables' them to produce carbo-hydrate from simple inorganic components.

A. Assertion and Reason are correct, Reason is the correct explanation of Assertion.

B. Assertion and Reason are correct, Reason is not the correct explanation of Assertion.

C. Assertion is false, Reason is true.

D. Assertion and Reason are false.

Answer: A



Watch Video Solution

22. Assertion: The product of starch is formed during photosynthesis by the combination of reactants such

as chlorophyll, H₂O and carbon dioxide.

Reason: The energy stored in starch is obtained from the external source (light energy from sun).

A. Assertion and Reason are correct, Reason is the correct explanation of Assertion.

B. Assertion and Reason are correct, Reason is not the correct explanation of Assertion.

C. Assertion is false, Reason is true.

D. Assertion and Reason are false.

Answer: B



Watch Video Solution

23. Assertion: In forest ecosystem the pyramid of number is somewhat different in shape.

Reason: The pyramid of number in forest ecosystem looks spindle shaped.

A. Assertion and Reason are correct, Reason is the correct explanation of Assertion.

B. Assertion and Reason are correct, Reason is not the correct explanation of Assertion.

C. Assertion is false, Reason is true.

D. Assertion and Reason are false.

Answer: B



Watch Video Solution

24. Assertion: Sea grasses and mangroves of Estuarine and coastal ecosystems are called as blue carbon ecosystem.

Reason: They are more efficient in carbon sequestration.

A. Assertion and Reason are correct, Reason is the correct explanation of Assertion.

B. Assertion and Reason are correct, Reason is not the correct explanation of Assertion.

C. Assertion is false, Reason is true.

D. Assertion and Reason are false.

Answer: A



Watch Video Solution

25. Assertion: By 2025, at least 90% of worlds population are projected to face water scarcity.

Reason: By 2025, 70% of forest cover will be destroyed.

A. Assertion and Reason are correct, Reason is the correct explanation of Assertion.

B. Assertion and Reason are correct, Reason is not the correct explanation of Assertion.

C. Assertion is false, Reason is true.

D. Assertion and Reason are false.

Answer: D



Watch Video Solution

26. Which of the following statement is correct?

A. Cultural services of ecosystem include Ecotourism.

B. Cultural services of ecosystem include water purification.

C. Cultural services of ecosystem include water cycling.

D. None of the above.

Answer: A



Watch Video Solution

27. Choose the incorrect statement:

A. Mangrove ecosystem offers habitat for aquatic plants and animals.

B. Mangrove ecosystem acts as nursery for aquatic animals.

C. It helps salt spray from waves.

D. It provides medicine, fuel wood and timber.

Answer: C



Watch Video Solution

28. Find out the. Correct statement.

- A. The pyramid of energy is always spindle shaped.
- B. The Pyramid of energy in always upright
- C. The pyramid of number in forest ecosystem is
always inverted
- D. None of the above.

Answer: B



Watch Video Solution

29. Indicate the incorrect statement.

A. Ten point law was proposed by Lindeman.

B. The concept of ecological pyramids was introduced by Charles Elton.

C. The ecosystem was defined by Odum.

D. All the above statements are not correct.

Answer: D



Watch Video Solution

30. Indicate the correct statement.

- A. All the primary producers are autotrophs.
- B. All the consumer are carnivores
- C. All the herbivores are only grass eaters,
- D. None of the above.

Answer: A



Watch Video Solution

Other Important Questions Answers Answer The Following 2 Marks

1. Define ecosystem.



[Watch Video Solution](#)

2. Write the name of two major components of Ecosystem.



[Watch Video Solution](#)

3. What is Photosynthetically Active Radiation (PAR)?



[Watch Video Solution](#)

4. Write the functions of ecosystem.



[Watch Video Solution](#)

5. Define productivity.



[Watch Video Solution](#)

6. Define community productivity.



[Watch Video Solution](#)

7. What is meant by food web?



[Watch Video Solution](#)

8. Define a ecological pyramid.



[Watch Video Solution](#)

9. Define humification.



[Watch Video Solution](#)

10. Mention the types of freshwater ecosystem.



[Watch Video Solution](#)

11. Mention any two phytoplankton in pond ecosystem.



Watch Video Solution

12. The photosynthesis is more in limnetic zone of pond.

Why?



Watch Video Solution

13. Mention any two cultural services of ecosystem.



Watch Video Solution

14. List out two factors, which affect the ecosystem.



Watch Video Solution

15. What is meant by Ecosystem resilience?



Watch Video Solution

16. Explain briefly about autotrophic succession.



Watch Video Solution

17. Describe the different levels of consumers in pond ecosystem.



Watch Video Solution

18. Distinguish between lotic and lentic ecosystem.



Watch Video Solution

19. Explain ten percent law with an example.



Watch Video Solution

20. Name the macro consumers and micro consumers.



Watch Video Solution

21. Write a diagrammatic representation of energy flow.



Watch Video Solution

22. What is the significance of food web?



Watch Video Solution

23. Give an account on the concept of trophic level in an ecosystem.



Watch Video Solution

24. Explain food web with suitable diagram.



Watch Video Solution

25. Draw the diagrammatic representation of pyramids of biomass different types of ecosystems.



Watch Video Solution

26. List the anthropogenic activities which affect ecosystem.



Watch Video Solution

27. (b) Enlist the strategies of eco system management?



Watch Video Solution