

TELANGANA UNIVERSITY
S.S.R. DEGREE & PG COLLEGE, NIZAMABAD
DEPARTMENT OF ZOOLOGY
SUB:- FISHERIES, SEM-III, PAPER-III
INTERNAL-I QUESTION BANK

I. Multiple Choice Questions

1. Which of the following is a major objective of fisheries science?
- A) Maximizing fish production - B) Studying bird migration
- C) Monitoring air pollution - D) Preserving aquatic plants
☒ Correct: A
2. Pisciculture refers to:
- A) Bird farming - B) Fish farming
- C) Bee keeping - D) Silk production
☒ Correct: B
3. Which Indian state leads in inland fish production?
- A) Kerala - B) West Bengal
- C) Gujarat - D) Punjab
☒ Correct: B
4. Which of the following is a pelagic fish?
- A) Catla - B) Rohu
- C) Sardine - D) Mrigal
☒ Correct: C
5. Which fish species is commonly used in polyculture systems?
- A) Tuna - B) Salmon
- C) Catla - D) Shark
☒ Correct: C
6. Induced breeding in fish involves:
- A) Natural spawning - B) Hormonal stimulation
- C) Cage culture - D) Netting
☒ Correct: B
7. Which fish is known for its air-breathing ability?
- A) Hilsa - B) Magur
- C) Rohu - D) Catla
☒ Correct: B
8. Hilsa is an example of:
- A) Catadromous fish - B) Anadromous fish
- C) Freshwater fish - D) Marine fish
☒ Correct: B
9. Which method is used to assess fish population in a water body?
- A) Tagging - B) Sonar
- C) Electrofishing - D) All of the above
☒ Correct: D

10. A major challenge in inland fisheries is:

- A) Oil spills
- B) Overfishing
- C) Tidal waves
- D) Marine pollution

✓ Correct: B

11. The primary source of dissolved oxygen in water bodies is:

- A) Fish respiration
- B) Rainfall
- C) Photosynthesis
- D) Decomposition

✓ Correct: C

12. Which factor most influences the productivity of a freshwater ecosystem?

- A) Wind speed
- B) Altitude
- C) Soil type
- D) Water temperature

✓ Correct: D

13. Which of the following is a benthic organism?

- A) Sardine
- B) Crab
- C) Tilapia
- D) Plankton

✓ Correct: B

14. Eutrophication in lakes is primarily caused by:

- A) Oil spills
- B) Overfishing
- C) Excess nutrients
- D) Thermal pollution

✓ Correct: C

15. Which parameter is used to measure water clarity?

- A) pH
- B) Salinity
- C) Turbidity
- D) Temperature

✓ Correct: C

16. Which of the following is a major pollutant in aquaculture systems?

- A) Oxygen
- B) Ammonia
- C) Nitrogen gas
- D) Carbon dioxide

✓ Correct: B

17. Which zone of a lake is most productive?

- A) Profundal zone
- B) Abyssal zone
- C) Littoral zone
- D) Benthic zone

✓ Correct: C

18. Which of the following is a primary consumer in aquatic food chains?

- A) Phytoplankton
- B) Zooplankton
- C) Fish
- D) Birds

✓ Correct: B

19. Which of the following is a major abiotic factor in aquatic ecology?

- A) Fish species
- B) Algae
- C) Temperature
- D) Zooplankton

✓ Correct: C

20. Which of the following is a non-renewable resource in aquatic ecosystems?

- A) Plankton
- B) Fish biomass
- C) Water
- D) Minerals

✓ Correct: D

II. Fill in the Blanks.

1. The branch of biology that deals with fish culture is called **fisheries science**.
2. **Aquaculture** includes the farming of fish, crustaceans, mollusks, and aquatic plants.
3. The Indian Council of Agricultural Research (ICAR) governs the **Central Institute of Fisheries Education**.
4. **Brackish water** is a mix of freshwater and seawater, often used in coastal aquaculture.
5. The fish species **Rohu** is a popular choice in Indian freshwater aquaculture.
6. **Spawn, fry, and fingerling** are developmental stages in fish seed production.
7. The **FAO** is the international organization that monitors global fisheries and aquaculture.
8. **Cage culture** involves growing fish in enclosures suspended in natural water bodies.
9. The **Blue Revolution** in India aimed to increase fish production through modern techniques.
10. **Fish meal** is a protein-rich feed made from processed fish, used in aquaculture diets.
11. The term **limnology** refers to the study of inland water bodies like lakes and rivers.
12. **Salinity** is the concentration of dissolved salts in water, crucial for aquatic life classification.
13. **Plankton** are microscopic organisms that drift in water and form the base of aquatic food chains.
14. **Thermal stratification** occurs when water layers separate based on temperature differences.
15. The **profundal zone** of a lake is deep and receives little to no sunlight.
16. **Biotic** factors include living organisms that influence aquatic ecosystems.
17. **Algal bloom** is a rapid increase in algae due to nutrient enrichment.
18. DO stands for **Dissolved Oxygen**, essential for respiration in aquatic organisms.
19. **Bioaccumulation** refers to the buildup of pollutants in the tissues of aquatic organisms.
20. **Wetlands** act as natural filters and breeding grounds for many aquatic species.

III. One-word Answers

1. What is the role of hatcheries in fisheries?

Hatcheries produce fish seed under controlled conditions to support aquaculture and restocking programs.

2. Name one exotic fish species introduced in Indian aquaculture.

Common Carp (Cyprinus carpio) is an exotic species widely cultured in India.

3. What is the function of a biofilter in a recirculating aquaculture system (RAS)?

It removes toxic nitrogen compounds like ammonia and nitrite, maintaining water quality.

4. What is the significance of the Fishery Survey of India (FSI)?

FSI conducts marine resource assessments and supports sustainable fishing practices.

5. Define monoculture in fisheries.

Monoculture is the cultivation of a single fish species in a pond or tank.

6. What is the role of wetlands in aquatic ecosystems?

Wetlands act as natural filters, flood buffers, and biodiversity hotspots.

7. Name one indicator species used to assess water pollution.

Tubifex worms are often used as indicators of organic pollution in freshwater.

8. What is thermal pollution?

It refers to the rise in water temperature due to industrial discharge, affecting aquatic life.

9. What is the difference between lentic and lotic ecosystems?

Lentic ecosystems are still water bodies (e.g., lakes), while lotic ecosystems have flowing water (e.g., rivers).

10. Why is dissolved oxygen critical in aquatic habitats?

It supports respiration in fish and other aerobic organisms; low levels can lead to fish kills.