

**2017**  
**ZOOLOGY**  
**Paper : 206 E**  
**AQUACULTURE**

Full Marks: 40

Time: 2 hours

The figures in the margin indicate full marks for the questions

1. **Answer the following (Any four) :** 1x4=4
- i. Which of the following statement is incorrect?
- a) Nektons are swimmer animals from small to large size
  - b) Benthos are bottom dweller organism
  - c) Phytoplanktonic algae help in the purification of water by replacing dissolved  $\text{CO}_2$  in water with  $\text{O}_2$ .
  - d) Zooplankton acts as primary producer in the aquatic pond ecosystem.
- ii. Stenohaline fishes are
- a) Marine fishes having narrow range of salt tolerance
  - b) Marine fishes high range of salt tolerance
  - c) Fresh water fishes adapted to marine water fishes
  - d) All the above.

- iii. Mesotrophic lakes refers to
- with an intermediate level of productivity
  - commonly clear water lake with medium levels of nutrients.
  - The term mesotrophic is also applied to terrestrial habitats
  - all the above
- iv. The optimum temperature range for the best growth of fishes in warm water lies between
- 25<sup>o</sup>c -32<sup>o</sup>c
  - 20<sup>o</sup>c-28<sup>o</sup>c
  - 20<sup>o</sup>c-25<sup>o</sup>c
  - 24<sup>o</sup>c -28<sup>o</sup>c
- v. A biotope is
- An area of uniform environmental conditions providing a living place for a specific assemblage of plants and animals.
  - A small scale phenomenon like aquarium.
  - Both (a) and (b)
  - Generally considered to be a large-scale phenomenon.

2. **Answer the following (Any three) :** 2x3=6

- Mention the ecological importance of wetland ecosystem.
- Write the characteristic features of estuarine ecosystem and their importance to capture fishery.
- what are the difference between capture and culture fisheries.
- write briefly about the cold water fishes of india.

3. **Answer the following questions (Any two) :** 5x2=10

- Trophic state index.
- seasonal and diurnal variation of planktons
- write about the objectives of Ramsar Site .

4. **Answer the following questions (Any one) :** 8x1=8.

- Describe the abiotic profile of freshwater ecosystem that should be maintained for high yield of fishery production.
- What do you mean by aquatic productivity? Describe the principle and measurement technique of primary and secondary productivity?

5. **Answer the following questions (Any one):** 12x1=12

- Discuss some common approaches of conservation of water and their management practices for sustainable development of aquatic resources.
- Discuss the classification of plankton and their significance in aquaculture with example of common phytoplankton of Indian rivers. 6+6=12

\*\*\*\*\*