

**B.Sc. Semester - 5 (CBCS) Examination****Oct/Nov - 2024 (NEW COURSE)****Fisheries Biology, Animal Husbandry, Wildlife, Biotechnology and Toxicology (Core)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) Answer the following question. (write any one out of two) (07)
1. Describe various Fish Byproducts.
  2. Why Aquaculture? Write a note on the basis of Aquaculture.
- Que.1(B) Answer the following question. (write any one out of two). (04)
1. Write notes on: a) Dropsy b) White Spot Disease.
  2. Write a note: Inland Fishery in India.
- Que.1(C) Answer the following question. (write any three out of five) (03)
1. Give the full form of AAA System which is an Integrated Aquaculture System.
  2. Provide the names of hormones and relevant gland used in Induced Breeding.
  3. Indian Major Carp naturally breeds in which season and condition?
  4. Which type of primary infection leads to fungal infection on Mechanical Injury?
  5. Which are the essential ingredients of Fish Feed?
- Que.2(A) Answer the following question. (write any one out of two) (07)
1. Write a detailed note on the species of honey bee used in Apiculture?
  2. Which are the rearing methods in Pearl Culture? Give a detail account of it.
- Que.2(B) Answer the following question. (write any one out of two) (04)
1. Write a short note on the external features and types of Silk Worm.
  2. Write a short note the rearing methods of Pearl Oyster.
- Que.2(C) Answer the following question. (write any three out of five) (03)
1. What is the role of super in Artificial Bee Hive.
  2. Which species of honey bee makes the hive on Rock Surface?
  3. What is the scientific name of Mulberry Silkworm?
  4. What is the contribution of Kokichi Mikimoto in the Pearl Culture?
  5. What is the scientific name of Little Bee?
- Que.3(A) Answer the following question. (write any one out of two) (07)
1. Write a detailed note on the Indian Biodiversity Hotspot.
  2. What is Keystone Species? Explain keystone species concept using beaver as an example.
- Que.3(B) Answer the following question. (write any one out of two) (04)
1. What is Ex-situ Conservation? Explain it with suitable examples.
  2. Write a note on the functions of IBWL.

- Que.3(C) Answer the following question. (write any three out of five). (03)
1. Nicobar Islands are part of which Biodiversity Hotspot?
  2. Give one -one example for endangered and critically endangered Species.
  3. What is the full form of CITES and WWF?
  4. Where is the CITES Secretariat Office Located?
  5. Give name of one bird sanctuary which is Asia's largest brackish water lagoon situated in the state of Odessa?
- Que.4(A) Answer the following question. (write any one out of two). (07)
1. Write a note: Cosmid Vector.
  2. Explain in detail: RDNA Technology.
- Que.4(B) Answer the following question. (write any one out of two). (04)
1. Explain in brief: types of Restriction Enzymes.
  2. Write a short note on PCR Technique.
- Que.4(C) Answer the following question. (write any three out of five) (03)
1. Give at least three uses of Bacteriophage.
  2. Give at least three examples of Restriction Enzymes.
  3. What are the application of Stem Cell Technique?
  4. Which are the six steps involved in RDNA Technology?
  5. Give any two applications of PCR Technique.
- Que.5(A) Answer the following question. (write any one out of two) (07)
1. Give detailed classification of Toxicants with suitable examples.
  2. Explain in details: Fluoride Toxicity.
- Que.5(B) Answer the following question. (write any one out of two) (04)
1. Explain mode of action of Metal Toxicants.
  2. Give applications of Toxicology.
- Que.5(C) Answer the following question. (write any three out of five) (03)
1. What are Mutagens?
  2. Write down examples of Heavy Metal Toxicants.
  3. Name the disease caused by Arsenic.
  4. Name the disease caused by Cadmium.
  5. What are the sources of heavy metal exposure to Human?

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