

B.Sc. Semester - 5 (CBCS) Examination**Oct/Nov - 2023 (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. Post harvesting techniques in fisheries.
 2. Write a detailed note on various diseases of fishes.
- Que.1(B) Answer the following question. (write any one out of two) (04)
1. Write a short note on fish nutrition.
 2. Give at least four valid reasons for selecting major carp for inland fishery.
- Que.1(C) Answer the following question. (write any three out of five) (03)
1. What fish by-product is made from a fish air bladder and what is its industrial application?
 2. Give names of top five important fishery resources in marine fisheries.
 3. Which hormones are useful in induced breeding in Indian major carp?
 4. Name the traditional methods of moisture removal for fish preservation.
 5. Write the treatment for costiasis disease in fish.
- Que.2(A) Answer the following question. (write any one out of two) (07)
1. Write a note on the modern method of apiculture?
 2. Describe the post-cocoon processing in sericulture.
- Que.2(B) Answer the following question. (write any one out of two) (04)
1. Write three drawbacks of indigenous method of honey collection.
 2. Draw the labelled diagram of artificial bee hive.
- Que.2(C) Answer the following question. (write any three out of five) (03)
1. List the species of bees used for Apiculture.
 2. Which countries are leading producers of raw silk?
 3. What is the ideal temperature range and salinity for pearl culture?
 4. What is the role of salivary gland in silkworm?
 5. What is the role of Queen Excluder in artificial bee hive?
- Que.3(A) Answer the following question. (write any one out of two) (07)
1. Describe various biodiversity hotspots of India.
 2. Explain the measures India has taken for in-situ conservation.
- Que.3(B) Answer the following question. (write any one out of two) (04)
1. Write a note on endemic mammals of India.
 2. Write a short note on ex-situ conservation.
- Que.3(C) Answer the following question. (write any three out of five) (03)
1. Dachigam Sanctuary is known for which endangered animal?
 2. Keoladeo Bird Sanctuary is located in which state?
 3. Who is the ex-officio chairman of the IBWL?
 4. Which is the first National Park of India?
 5. Give two examples of keystone species.

- Que.4(A) Answer the following question. (write any one out of two) (07)
1. Explain pBR322 vector.
 2. Explain in brief about gene cloning in biotechnology
- Que.4(B) Answer the following question. (write any one out of two) (04)
1. Give difference between iso-schizomer and iso-caudomers.
 2. Explain in short: Types of stem cells.
- Que.4(C) Answer the following question. (write any three out of five) (03)
1. Give full form of YAC vector.
 2. List out any two applications of stem cells.
 3. Cosmid vector are fusion of.....
 4. Which was the first restriction enzyme that was isolated?
 5. Expand EcoR1 restriction enzyme.
- Que.5(A) Answer the following question. (write any one out of two) (07)
1. Give classification of toxicant based on effect of health.
 2. Give general account on Arsenic toxicity along with its effect on health, symptoms and preventive measures.
- Que.5(B) Answer the following question. (write any one out of two) (04)
1. Explain mode of action of cadmium metal.
 2. Give any four applications of toxicology.
- Que.5(C) Answer the following question. (write any three out of five) (03)
1. Chemical causing mutation in DNA sequence is called as.....
 2. Define toxicant.
 3. Give a difference between chronic toxic effect and acute toxic effect.
 4. Write any two symptoms of chronic arsenic poisoning.
 5. Heavy metals are organic compounds in nature. (true/false).
