

B.Sc. Semester - 5 (Remedial) (CBCS) Examination

February/March. -2020

**FISHERIES BIOLOGY, ANIMAL HUSBANDRY, WILD LIFE, BIOTECHNOLOGY, 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) Attempt any one of the following. (07)**
1. Explain in detail inland fisheries.
 2. Describe in detail induced breeding in carp fisheries.
- Que-1 (B) Attempt any one of the following. (04)**
1. Write a short note on fish diseases.
 2. Describe nutrition in fish.
- Que-1 (C) Attempt any three of the following. (03)**
1. Name the oldest fish preservation method.
 2. What are different uses of fish oil.
 3. Causal organism for sliminess of skin in fishes.
 4. Fish glue as a by product.
 5. Write any three merits of freezing method.
- Que-2 (A) Attempt any one of the following. (07)**
1. Describe in detail the post-cocoon processing.
 2. Explain the life history of *Apis indica*.
- Que-2 (B) Attempt any one of the following. (04)**
1. Write a short note on modern appliances used for honey extraction.
 2. Explain in short the life cycle of *Bombyx mori*.
- Que-2 (C) Attempt any three of the following. (03)**
1. Eggs of silkworm are also known as _____.
 2. Fanning in the hive is performed by wings of _____.
 3. Honey is composed of 80% of _____.
 4. Define nuptial flight.
 5. What is Univoltine race.
- Que-3 (A) Attempt any one of the following. (07)**
1. Distinguish between in-situ and ex-situ conservation.
 2. Explain in detail Key Stone Species.
- Que-3 (B) Attempt any one of the following. (04)**
1. Mention the Kaziranga and Jim Corbett National Park.
 2. Write short note on Biodiversity Hot Spot in India.
- Que-3 (C) Attempt any three of the following. (03)**
1. What is the location and exclusive species of Chilka Lake Sanctuary.
 2. Make a list of fauna of Dechigam Sanctuary.
 3. Animal honoured in logo of WWF is _____.
 4. Write any five endemic mammals of India.
 5. What is main function of CITES.

- Que-4 (A) Attempt any one of the following. (07)**
1. Describe modification system used by lambda phage.
 2. Give a brief account on gene cloning in biotechnology.
- Que-4 (B) Attempt any one of the following. (04)**
1. Write the differences between YAC and BAC vectors.
 2. Difference between isoschizomer and neoschizomer.
- Que-4 (C) Attempt any three of the following. (03)**
1. Define vector in biotechnology.
 2. Insert size in lambda phage is _____.
 3. Restriction enzyme recognizes _____ sequences.
 4. What is full form of pBR322.
 5. Example of Multienzyme complex type of restriction enzyme.
- Que-5 (A) Attempt any one of the following. (07)**
1. Explain in detail the dose response relationship in toxicology.
 2. Define metal toxicity and write the toxic effects of Arsenic.
- Que-5 (B) Attempt any one of the following. (04)**
1. Write down the toxic effects of lead.
 2. Based on target organ classify toxicants.
- Que-5 (C) Attempt any three of the following. (03)**
1. Define median lethal dose.
 2. Hunched back is symptom of _____ toxicity.
 3. What do you mean by Acute toxic effect.
 4. What is biomagnification.
 5. Define xenobiotics.
