

B.Sc. Semester - 5 (CBCS) Examination

Oct/Nov. – 2019

**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 bye 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_____.
3. Fanning in the hive is performed by wings of _____.
4. Honey is composed of 80% of_____.
5. 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 exculsive species of Chilika Lake Sanctuary.
2. Make a list of fauna of Dachigam 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 biotectnology.
2. Insert size in lambda phage is_____
3. Restriction enzyme recognizes _____ sequences.
4. What if 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.
