



**RO-003-1015018** Seat No. \_\_\_\_\_

**Third Year B. Sc. (Sem. V) (CBCS) Examination**

February - 2019

**Zoology : Z - 502**

*(Fisheries Biology, Animal Husbandary, Wild Life  
Biotechnology, Toxicology)*

**Faculty Code : 003**

**Subject Code : 1015018**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

**Instructions :**

- (1) Illustrate your answers with neat and labeled diagram.
- (2) Figures to the right side indicate full marks for the questions

- 1 (a) Answer the following questions 4
    - (1) What is Inland fisheries?
    - (2) Name the fungi causing Gill Rot disease in fish.
    - (3) Major source of fish gelatin is \_\_\_\_\_.
    - (4) Main causes of fish spoilage is \_\_\_\_\_.
  - (b) Answer in Brief (any 1 out of 2) 2
    - (1) Advantages of formulated food.
    - (2) Give causes of fish spoilage by bacteria.
  - (c) Answer in detail (any 1 out of 2) 3
    - (1) Give brief note on Dropsy.
    - (2) Carbohydrate as fish nutrition.
  - (d) Write a note on (any 1 out of 2) 5
    - (1) Explain Induced breeding in detail.
    - (2) Post harvesting techniques in fisheries.
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- 2 (a) Answer the following questions : 4
    - (1) Give scientific name of silk worm.
    - (2) Who invented movable artificial hives
    - (3) Give the name of bee enemies.
    - (4) How much metres of silk thread can produce by single caterpillar ?

- (b) Answer in Brief (any 1 out of 2) 2
- (1) Give economic importance of Honey Bee.
  - (2) Short note on types of Silkworm.
- (c) Answer in detail (any 1 out of 2) 3
- (1) Short note on rearing of silkworm.
  - (2) Write life history of Bombyx mori.
- (d) Write a note on (any 1 out of 2) 5
- (1) Explain in detail Apiculture.
  - (2) Give a note on sericulture.
- 3** (a) Answer the following questions 4
- (1) Give a full form of CITES.
  - (2) What is Wildlife Protection Act ?
  - (3) Define Keystone species.
  - (4) What is In-situ conservation ?
- (b) Answer in Brief (any 1 out of 2) 2
- (1) Write location and fauna of Gim Corbatt National Park.
  - (2) Write note on World Wildlife Fund.
- (c) Answer in detail (any 1 out of 2) 3
- (1) Write note on Dachigam Sanctuary.
  - (2) Describe IBWL.
- (d) Write a note on (any 1 out of 2) 5
- (1) Describe endangered and endemic species in India
  - (2) Write note on Hot spots of Biodiversity.
- 4** (a) Answer the following questions 4
- (1) What is cloning ?
  - (2) What is biotechnology ?
  - (3) Define restriction enzyme.
  - (4) Explain exonuclease enzymes.

- (b) Answer in Brief (any 1 out of 2) **2**  
 (1) Write applications of Restriction enzymes.  
 (2) Explain Natural Cloning.
- (c) Answer in detail (any 1 out of 2) **3**  
 (1) Explain BAC vector.  
 (2) Write note on Cell cloning.
- (d) Write a note on (any 1 out of 2) **5**  
 (1) Write note on plasmid vector.  
 (2) Brief account on Bacteriophage vectors.
- 5** (a) Answer the following questions **4**  
 (1) Define Metal.  
 (2) What is toxicology ?  
 (3) Which metal can cause dental flurosis.  
 (4) Which metal is known as the Poison of Kings ?
- (b) Answer in Brief (any 1 out of 2) **2**  
 (1) Explain any four characteristics of Exposer in toxicology.  
 (2) Toxicity of Floride.
- (c) Answer in detail (any 1 out of 2) **3**  
 (1) Write note on absorpition of toxicants by the lungs.  
 (2) Give a detail account on absorpition of toxicants through the skin.
- (d) Write a note on (any 1 out of 2) **5**  
 (1) Give the detail account on toxicity and treatment of arsenic.  
 (2) Classification of toxicants.
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