



**PAQ-003-1015018**

Seat No. \_\_\_\_\_

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

**October / November - 2018**

**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 labelled diagram.  
(2) Figures to the right side indicate full marks for the question.

- 1 (a) Answer the following questions : 4
- (1) What is aquaculture?
  - (2) Name the bacteria causing dropsy disease in fish.
  - (3) What is fish by - product, describe any two (only name)
  - (4) Fish louse is also known as \_\_\_\_\_.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Nutrition in fish.
  - (2) Describe any two fish preservation methods.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Give brief note on constiasis.
  - (2) Protein and Lipid as fish nutrition.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Explain Induced breeding.
  - (2) Post harvesting techniques in fisheries.

- 2** (a) Answer the following questions : **4**
- (1) Give scientific name of silk worm.
  - (2) Apiculture involves in \_\_\_\_\_.
  - (3) Give the name of bee enemies.
  - (4) Wing span of silkmoth is about \_\_\_\_\_.
- (b) Answer in Brief : (any 1 out of 2) **2**
- (1) Give economic importance of silkworm.
  - (2) Short note on apiculture.
- (c) Answer in detail : (any 1 out of 2) **3**
- (1) Modern method of apiculture.
  - (2) Write life cycle of Honey bee.
- (d) Write a note on : (any 1 out of 2) **5**
- (1) Rearing of silkworm.
  - (2) Give a note on sericulture.
- 3** (a) Answer the following questions : **4**
- (1) Give difference between endangered and endemic species.
  - (2) IBWL was first constituted in \_\_\_\_\_.
  - (3) In which year Dachigam sanctuary declare as national park?
  - (4) What is Ex-situ and In-situ conservation?
- (b) Answer in brief : (any 1 out of 2) **2**
- (1) Explain Ranthambhor National Park.
  - (2) Write note on CITES.
- (c) Answer in detail : (any 1 out of 2) **3**
- (1) Write note on WWF.
  - (2) Describe Manas and Mudumalai wildlife sanctuary.

- (d) Write a note on : (any 1 out of 2) 5
- (1) Write Keystone species.
  - (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) Explain Biotechnology.
  - (2) Explain YAC Vector.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Explain BAC vector.
  - (2) Write note on gene cloning.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Write note on plasmid vector.
  - (2) Brief account on types of cloning.
- 5 (a) Answer the following questions : 4
- (1) Define Metal.
  - (2) What is toxicology?
  - (3) Which metal can cause dental fluorosis ?
  - (4) Which metal is known as the Poison of Kings?
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Explain toxicity of arsenic.
  - (2) Toxicity of Flouride

- (c) Answer in detail : (any 1 out of 2) **3**
- (1) Classification of toxicants.
  - (2) Explain skeletal fluorosis.
- (d) Write a note on : (any 1 out of 2) **5**
- (1) Explain lead as toxic substance.
  - (2) Toxicity and treatment of Lead and Arsenic.
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