



JW-003-1015018

Seat No. _____

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

October - 2019

Zoology : Z - 502

*(Fisheries Biology, Animal Husbandary,
Wildlife, 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) Name any two fish byproduct.
 - (2) White spot disease caused by which organism ?
 - (3) Major source of fish gelatin is _____.
 - (4) What is Inland Fisheries ?
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Advantages of formulated food.
 - (2) Give scope of Aquaculture.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Give brief note on Coastiasis.
 - (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.
- 2 (a) Answer the following questions : 4
- (1) Give scientific name of Silkworm.
 - (2) Give scientific name of Honey Bee.
 - (3) Give the name of Bee Enemies.
 - (4) Most important product of Apiculture is _____.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Write a note on apiculture in India.
 - (2) Economic Importance of Sericulture.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe various products of apiculture.
 - (2) Write life history of *Bombyx mori*.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Explain the rearing of silkworm.
 - (2) Give a brief account of apiculture.
- 3 (a) Answer the following questions : 4
- (1) Give a full form of CITES.
 - (2) Manas wildlife sanctuary is also known as
 - (3) Dachigam sanctuary was declared as wildlife sanctuary in the year.
 - (4) What is In-situ conservation ?

- (b) Answer in brief : (any 1 out of 2) 2
- (1) Give difference between national park and sanctuary.
 - (2) Write note on World Wildlife Fund.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Write note on Periyar Sanctuary.
 - (2) Describe WWF.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Describe Keystone species.
 - (2) Write note on Hot spots of Biodiversity.
- 4 (a) Answer the following questions : 4
- (1) Name of any two types of cloning ?
 - (2) What is biotechnology ?
 - (3) Define restriction enzyme.
 - (4) Explain exonucleases enzymes.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Different branch of biotechnology.
 - (2) Explain Cell Cloning.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Give mechanism of Restriction Enzymes.
 - (2) Explain gene 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) Which metal known as carcinogenic metalloid ?
 - (2) What is toxicology ?
 - (3) Which metal can cause dental fluorosis ?
 - (4) Fluorine was isolated by _____ in the year _____.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Explain toxic kinetics of arsenic.
 - (2) Dental fluorosis.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Classification of toxicant.
 - (2) Give a detail account on absorption of toxicants through the skin.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Explain lead as toxic substance.
 - (2) Explain characteristics of exposure.
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