



DBK-003-1015018

Seat No. _____

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

June - 2022

Zoology : Paper - Z-502

*(Fisheries Biology, Animal Husbandry, 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) Give definition of Aquaculture.
 - (2) What is inland fisheries ?
 - (3) Name of any five fish by-products.
 - (4) Which organism causes fungus infection in fishes ?
- (b) Answer in brief : 2

Fish ponds according to constructive method.
- (c) Answer in detail : 3

Minerals in fish nutrition.
- (d) Write a note on : 5

Explain induced breeding.
- 2 (a) Answer the following questions : 4
 - (1) Name of some Zooplankton used for fish feed.
 - (2) By which organism costiasis disease caused to fish ?
 - (3) What is the main symptom of white spot disease in fish ?
 - (4) Give names of basic types of fish pond.
- (b) Answer in brief : 2

Advantages of formulated food.

- 6** (a) Answer the following questions : **4**
 (1) Define Endangered species.
 (2) Rhinoceros found in which national park of India.
 (3) Give full form of CITES.
 (4) Define Keystone species.
- (b) Answer in brief : **2**
 Give location and Fauna of Jim Corbett National Park.
- (c) Answer in detail : **3**
 Explain Ex-situ conservation.
- (d) Write a note on : **5**
 Describe endangered and endemic species of India.
- 7** (a) Answer the following questions : **4**
 (1) What is endonuclease enzyme ?
 (2) What is Plasmids ?
 (3) Define Biotechnology.
 (4) Give any four name of types of cloning.
- (b) Answer in brief : **2**
 Explain Natural Cloning.
- (c) Answer in detail : **3**
 Give Mechanism of Restriction enzymes.
- (d) Write a note on : **5**
 Brief account on Bacteriophage vectors
- 8** (a) Answer the following questions : **4**
 (1) What is Exonuclease enzyme ?
 (2) What is cloning ?
 (3) Define restriction enzyme.
 (4) What is white biotechnology ?
- (b) Answer in brief : **2**
 Explain Yeast artificial chromosomes vector.
- (c) Answer in detail : **3**
 Write a note on Cell cloning.
- (d) Write a note on : **5**
 Give brief and basic introduction of Biotechnology.
- 9** (a) Answer the following questions : **4**
 (1) Define toxicology.
 (2) Write characteristics of arsenic exposure.
 (3) Define environmental toxicology.
 (4) Give structure of Arcenic.

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| (b) | Answer in brief : | 2 |
| | Dental flurosis. | |
| (c) | Answer in detail : | 3 |
| | Explain skeletal fluorosis | |
| (d) | Write a note on : | 5 |
| | Give detail account on toxicity and treatment of Arcenic. | |
| 10 | (a) Answer the following questions : | 4 |
| | (1) Define toxicant. | |
| | (2) Write characteristics of lead exposure. | |
| | (3) What is mechanistic toxicologist ? | |
| | (4) Give structure of Lead. | |
| (b) | Answer in brief : | 2 |
| | What is metal ? | |
| (c) | Answer in detail : | 3 |
| | Classification of toxicant. | |
| (d) | Write a note on : | 5 |
| | Explain Lead as toxic substance. | |
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