



Seat No. _____

HAK-003-1015018
B. Sc. (Sem.-V) (W.E.F. 2016)
Examination
May - 2023
Zoology : Z-502
*(Fisheries Biology, Animal Husbandry,
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 diagrams.
- (2) Figures to the right side indicate full marks of question.

- 1 (a) Give answers of following questions : 4
- (1) Define inland fisheries.
 - (2) Nursery pond is used for _____.
 - (3) Which organism is responsible for development of slimness of skin in fish ?
 - (4) Write a use of fish gelatin.
- (b) Write any one out of two : 2
- (1) Write note on fish liver oil.
 - (2) Make a note on advantages of formulated food.
- (c) Write any one out of two : 3
- (1) Explain fish feed.
 - (2) Describe lipid as a nutrition source in fish.
- (d) Write any one out of two : 5
- (1) Explain induce breeding in detail.
 - (2) Discuss different types of fish pond.

- 2 (a) Give answers of following questions : 4
- (1) A full grown 5th instar caterpillar of silk worm has _____ segmented body.
 - (2) Honey bee belongs to which class ?
 - (3) Make a list of most important produce of apiculture.
 - (4) Spinning tray is used for _____.
- (b) Write any one out of two : 2
- (1) Write a note on economic importance of honey bee.
 - (2) Describe indigenous method of apiculture.
- (c) Write any one out of two : 3
- (1) Describe various products of apiculture.
 - (2) Describe different species of honey bee in India.
- (d) Write any one out of two : 5
- (1) Discuss in detail life cycle of *honey bee*.
 - (2) Write a note on sericulture.
- 3 (a) Give answers of following questions : 4
- (1) Write a full name of IBWL.
 - (2) Define key stone species.
 - (3) Keoladeo national park is also known as _____.
 - (4) Where the headquarter of WWF is located in _____ city of India?
- (b) Write any one out of two : 2
- (1) Write only names of Hotspots biodiversity.
 - (2) Write a short note on CITES.
- (c) Write any one out of two : 3
- (1) Write a note on mammalian endangered species.
 - (2) Make a note on in situ hybridization.
- (d) Write any one out of two : 5
- (1) Discuss key stone species.
 - (2) Describe Jim Corbatt national park.
- 4 (a) Give answers of following questions : 4
- (1) BAC can accept DNA inserts of around _____ kb.
 - (2) Write the function of DNA ligase in recombinant technology.
 - (3) Write the full name of CBB.
 - (4) What is recognition sequence?

- (b) Write any one out of two : 2
(1) Restriction endonucleases.
(2) Discuss method for gene transfer.
- (c) Write any one out of two : 3
(1) Describe bacteriophage.
(2) Write a basic principle of rDNA technology.
- (d) Write any one out of two : 5
(1) Give a detailed account on gene cloning.
(2) Write a step for rDNA technology.
- 5** (a) Give answers of following questions : 4
(1) What is toxicant ?
(2) Which metal is known as a carcinogenic method ?
(3) Fluoride was isolated by _____ in the year _____.
(4) Which metal is used as a poison of king.
- (b) Write any one out of two : 2
(1) Brief note on dental fluorosis.
(2) Make a note on acute poisoning of arsenic.
- (c) Write any one out of two : 3
(1) Explain classification of toxicant.
(2) Give account of a treatment of arasenic toxicity.
- (d) Write any one out of two : 5
(1) Describe lead as a toxic substance.
(2) Describe absorption from targetted site.
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