

1 (Sem-5/FYUGP) ZLG 44 MJ

2025

ZOOLOGY

(Major)

Paper : ZLG0500404

(**Entomology and Fisheries**)

Full Marks : 45

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. Choose the correct option : 1×5=5

- (a) Insects are characterized by having
- (i) three pairs of legs and three body regions
 - (ii) two pairs of legs and three body regions
 - (iii) three pairs of legs and two pairs of antennae
 - (iv) three pairs of legs and four body regions
- (b) Siphoning type of mouthpart is found in
- (i) mosquitoes
 - (ii) cockroaches
 - (iii) grasshoppers
 - (iv) butterflies

(2)

- (c) *Labeo rohita* (Rohu) is an omnivore and according to its feeding zone it is
- (i) surface feeder
 - (ii) column feeder
 - (iii) bottom feeder
 - (iv) All of the above
- (d) In extensive fish culture, the main source of food for fish is
- (i) artificial feed
 - (ii) natural plankton and detritus
 - (iii) mixed diet
 - (iv) chemical fertilizers
- (e) Soft bodied insects and immature life stages of the insect pests are preserved in
- (i) 70-75% ethyl alcohol
 - (ii) glycerine
 - (iii) 5% formalin
 - (iv) All of the above

2. Answer the following questions (any five) :

2×5=10

- (a) What is meant by a plant pest? Mention any two ways by which insects damage plants.
- (b) Differentiate between Apterygota and Pterygota.

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(Continued)

(3)

- (c) Write about impact of climate change on marine fisheries.
- (d) What do you mean by pollen basket?
- (e) Name the different types of scales found in fishes based on their morphology and development.
- (f) Mention the role of swim bladder in buoyancy.
- (g) Define intensive fish culture.
- (h) Distinguish between pen culture and cage culture.
- (i) Name two important Fisheries Acts.
- (j) Briefly write about the role of insects as vectors of human diseases.

3. Answer the following questions (any four) :

5×4=20

- (a) Distinguish between Chondrichthyes and Osteichthyes with examples.
- (b) Explain the role of insects in pollination with suitable examples.
- (c) Write about the application of GIS and Remote Sensing in fisheries resource management.
- (d) Discuss the biological and structural factors responsible for the success of insects on earth.

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(Turn Over)