

[Time: Three Hours]

[Marks:100]

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
 2. Figures to the right indicate full marks.
 3. Draw neat, labelled diagram wherever necessary.

Q. 1 A) Fill in the blanks by choosing the correct option. (05)

- i) _____ is an example of exotic fish species.
(Catfish, Tilapia, Cichlid)
- ii) _____ is fresh water fish.
(Butterfly fish, Anemone fish, Molly)
- iii) Moths of the jowar stem borer is _____ in nature.
(Diurnal, Nocturnal, Crepuscular)
- iv) Bedbug is a _____ pest.
(Agricultural, Household, Structural)
- v) _____ collected the first specimen to identify flying frog.
(Dr. Khorana, Alfred Wallace, Charles Darwin)

B) Match the column I & II and rewrite- (05)

Column I	Column II
i) Fish Feed	a) Crop rotation
ii) Molly	b) Brine Shrimp
iii) Cultural control of pest	c) Largest Swallowtail butterfly
iv) Weevil	d) Hardy adaptable species of fish
v) Blue Mormon	e) Common pest on rice

C) State whether True or False. (05)

- i) Tubifex is formulated fish feed.
- ii) Guppy is marine aquarium fish.
- iii) IPM stands for integral pest manipulation.
- iv) Knapsack sprayer is used for fumigation.
- v) Purple crab is also referred as joker crab.

D) Answer in **one** sentence (05)

- i) What is sexual dimorphism in fish?
- ii) What is monophagus pest?
- iii) Any one example of antidote.
- iv) What is the name of endemic snake species of Tanzania?
- v) What is the unique character of Spatule tail humming bird?

Q. 2 A) Answer **any one** from the following questions. (10)

- i) Write in brief about fish transportation.
- ii) Describe live fish feed.

B) Answer **any two** from the following questions. (10)

- i) Biology of molly
- ii) Scope of maintenance of an aquarium
- iii) Common characters and sexual dimorphism of anemone fish.
- iv) Biology of goldfish.

Q.3 A) Answer **any one** from the following questions. (10)

- i) Different type of non-insect pest and their control measures.
- ii) Life cycle, nature of damage and control measure of aphids.

B) Answer **any two** from the following questions. (10)

- i) Life cycle of brinjal fruit borer.
- ii) Squirrel as a pest
- iii) Mechanical control of pests
- iv) Rotary duster as a plant protection appliance

Q.4 A) Answer **any one** from the following questions. (10)

- i) Give a brief account of king fisher and spatule tailed humming bird
- ii) Describe marvelous characters of mantis shrimp and mudskipper.

B) Answer **any two** from the following questions. (10)

- i) Amazing characters of strawberry poison frog
- ii) Tiger butterfly as flying jewel
- iii) Homing in pacific salmon
- iv) Amazing characters of drongo

Q.5 Write short notes on **any four** of the following questions. (20)

- i) Fish packing
- ii) Example of exotic species of fish
- iii) Mechanical control of pest
- iv) Life cycle of aphid
- v) Crime fighting gecko
- vi) Amazing aspects of cheetah.