

[Time: 3 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 and labelled diagrams wherever necessary.

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

(05)

- 1) _____behaviour is controlled by genes and is without any environmental influence.
 - a. Habituation
 - b. Innate
 - c. Conditioning
- 2) Chewing finger nails in human during a tense situation is an example of _____ activity.
 - a. displacement
 - b. amphidromous
 - c. foraging
- 3) _____is caused by *Wuchereria bancrofti*.
 - a. Elephantiasis
 - b. Rabies
 - c. Cysticercosis
- 4) _____ is also known as Asian hive bee.
 - a. *Apis laboriosa*
 - b. *Apis cerena indica*
 - c. *Apis florea*
- 5) _____is used for chilling of milk in dairy processing.
 - a. Stacked bin
 - b. Immersion tank
 - c. Centrifugal separator

Q.1 B) Match the columns I and II and rewrite.

(05)

Column I	Column II
1) European foulbrood disease	a) Vermiculture
2) Ritualization	b) Anthrax
3) Zoonosis	c) Honey bee
4) Top-fed windrows	d) Hilsa
5) Anadromous migration	e) Great crested grebe

Q.1 C) State whether true or false.

(05)

- 1) Habituation is the form of learning.
- 2) Cercaria is the larval stage of tape worm.
- 3) Scabies is caused by bed bugs.
- 4) Earthworms are used as a fish baits.
- 5) A1 milk is obtained from European breeds like Holstein Friesian.

Q.1 D) Answer in only one sentence.

(05)

- 1) Define Altruism.
- 2) What is allomothering?
- 3) What is mechanical vector?
- 4) What is propolis?
- 5) Define vermiculture.

Q.2 A) Describe social behaviour in primates.

(10)

OR

A) Describe imprinting and its types with suitable examples.

(10)

Q.2 B) Explain **any two** of the following.

(10)

- Territorial behaviour in animals.
- Instrumental learning in animals.
- Communication in ants.
- Batesian mimicry.

Q.3 A) Describe life cycle of *Taenia solium*.

(10)

OR

A) Describe morphology, pathogenicity and control measures of bed bug.

(10)

Q.3 B) Explain **any two** of the following.

(10)

- Pathogenicity and control measures with respect to *Fasciola hepatica*.
- Morphology of head louse.
- Mode of transmission and control measures of Anthrax.
- Pathogenicity caused due to *Entamoeba histolytica*. Add a note on its treatment.

Q.4 A) Describe composition of milk.

(10)

OR

A) Describe different pests and enemies of honey bees.

(10)

Q.4 B) Explain **any two** of the following.

(10)

- Disadvantages of traditional apiculture.
- Demands for earthworms.
- Pasteurization of milk.
- Different species of earthworms used in vermiculture.

Q.5 Write short notes on **any four** of the following.

(20)

- Pavlov's experiment on classical conditioning
- Control measures and treatment of Taeniasis.
- Innate behaviour in animals
- Types of hosts.
- Harvesting of worms in vermiculture
- Buffalo milk
