C 2671

Name.....

Reg. No.....

FOURTH SEMESTER P.G. DEGREE EXAMINATION, APRIL 2021

(CCSS)

M.Sc. Applied Zoology

ZOO 4E 23—MEDICAL, VETERINARY AND FORENSIC ENTOMOLOGY

(2019 Admissions)

Time : Three Hours Maximum : 80 Marks

I. Write essays on any *two* of the following :

1 Elaborate on the adaptations of medically important insect vectors.

2 Write on the diagnostic and clinical features and epidemiology of different types of Malaria.

3 Explain the diagnostic features, taxonomy and biology of forensically important beetle families.

4 Comment on the biology of dipteran families of veterinary importance.

(2 × 15 = 30 marks)

II. Write short essays on any *three* of the following :

5 Enumerate the biology of human head and body lice.

6 Explain the diagnostic features, taxonomy and biology of carrion beetles.

7 Comment on the life cycle stages of forensically important flies.

8 Enumerate the biology of the family Pulicidae.

9 Write on the diseases caused by lice to domestic animals.

(3 × 10 = 30 marks)

III. Write short notes on any *five* of the following :

10 Mouthparts of mosquito.

11 Vesicating beetles.

12 *Xenopsylla*.

13 Origin of parasitism.

14 mt DNA technique in Forensic Entomology.

15 Sarcophagid flies of forensic importance.

16 Cutaneous myiasis.

17 Sheep bot fly.

(5 × 4 = 20 marks)

C 2670

Name.....

Reg. No.....

FOURTH SEMESTER P.G. DEGREE EXAMINATION, APRIL 2021

(CCSS)

M.Sc. Applied Zoology

ZOO 4E 22—ECOLOGY AND ETHOLOGY OF INSECTS

(2019 Admissions)

Time : Three Hours Maximum : 80 Marks

I. Write essays on any *two* of the following :

1 Write an essay on food finding mechanisms in insects.

2 Explain the types and patterns of pollination.

3 Write an essay on the impediments in insect conservation.

4 Describe the different types and patterns of herbivory.

(2 × 15 = 30 marks)

II. Write short essays on any *three* of the following :

5 Describe the mating and courtship behaviour in insects.

6 Explain the factors affecting dispersal behaviour in insects.

7 Enlist the effects of seed predation and dispersal by insects.

8 Describe the responses by insects to degradation and fragmentation of ecosystems.

9 Give an account of the plant characteristics that affect enemy - prey interactions.

(3 × 10 = 30 marks)

III. Write short notes on any *five* of the following :

10 Secondary metabolites.

11 Pest management strategies used in organic farming.

12 Intra-guild predation.

13 Volatile sex attractants.

14 Trophic cascades.

15 Putative alarm and appeasement pheromones.

16 Pollinator functional groups.

17 Invasive insects.

(5 × 4 = 20 marks)

C 2669

Name.....

Reg. No.....

FOURTH SEMESTER P.G. DEGREE EXAMINATION, APRIL 2021

(CCSS)

M.Sc. Applied Zoology

ZOO 4E 21—INSECTS PESTS—CONTROL AND MANAGEMENT

(2019 Admissions)

Time : Three Hours Maximum : 80 Marks

I. Write essays on any *two* of the following :

1 Write on important insect pests of plantation crops with reference to diagnosis, nature of damage and control measures.

2 Elaborate on insecticide formulations.

3 Explain the principles of behavioural control.

4 Write on the principles and ecological basis of biological control.

(2 × 15 = 30 marks)

II. Write short essays on any *three* of the following :

5 Explain the concept of pest management. Write on pest management strategies and techniques.

6 Comment on insecticide hazards.

7 Write briefly on four important insect pests of mango.

8 Write on forecasting pest outbreak and surveillance.

9 Write a concise account on microbial control of insect pests.

(3 × 10 = 30 marks)

III. Write short notes on any *five* of the following :

10 The three "R"s of pest management awareness.

11 Legal control of pests.

12 Moulting hormone analogues in pest control.

13 Entomopathogenic fungi.

14 Allomone.

15 Organophosphates.

16 Mention one successful biocontrol project of weeds.

17 Repellents.

(5 × 4 = 20 marks)