

(6 pages)

Reg. No. :

Code No. : 5457

Sub. Code : ZZOM 43

M.Sc. (CBCS) DEGREE EXAMINATION,
APRIL 2023.

Fourth Semester

Zoology – Core

ENTOMOLOGY

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer :

1. Identify the order in which beetles and weevils are included
 - (a) hymenoptera
 - (b) isoptera
 - (c) coleoptera
 - (d) diptera

2. Match the following with the preservation of Pinned insects
 - (a) steaming
 - (b) dehydration
 - (c) sun drying
 - (d) heating
3. Match the insects which have chewing and lapping type of mouthparts
 - (a) bees and wasps
 - (b) mosquito
 - (c) ants
 - (d) cockroach
4. Which of the following exhibit the partial metamorphosis?
 - (a) wasp
 - (b) ant
 - (c) dragonfly
 - (d) all the above
5. Identify the following where the hemocytes are present
 - (a) lymph
 - (b) hemolymph
 - (c) spiracles
 - (d) stigmata
6. Identify the which Inorganic salts mostly present in the hemolymph of Insects
 - (a) sodium
 - (b) chlorine
 - (c) potassium
 - (d) all the above

Page 2

Code No. : 5457



7. Identify the pest of Paddy

- (a) *Bombyx sp*
- (b) *Megascolex*
- (c) *Oryctes rhinoceros*
- (d) *Chilo*

8. Tell the common name of *Leptocorisa varicornis*.

- (a) rice bug
- (b) cotton weevil
- (c) cotton bug
- (d) coconut beetle

9. Identify the following which controls the mosquito larva

- (a) *Gambusia* (b) Lady beetles
- (c) Prawm (d) Salmon

10. Identify an example of semiochemicals.

- (a) Hormones
- (b) Ecdyzone
- (c) Insect pheromones
- (d) FSH

Page 3

Code No. : 5457

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the characteristics of order Hymenoptera.

Or

- (b) Interpret the killing insects.

12. (a) Illustrate the segmentation in an abdomen.

Or

- (b) Explain the hypermetabolous development in insect.

13. (a) Explain the functions of integuments in insects.

Or

- (b) Write a note on hemolymph.

14. (a) Evaluate the damage caused by sugar cane leaf borer.

Or

- (b) Predict the damages caused by *Oryctes rhinoceros*.

Page 4

Code No. : 5457

[P.T.O.]



15. (a) Write a note on pest control through cultural method.

Or

- (b) Write short note on Sterile insect technique.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss the various method of collection and preservation of insects.

Or

- (b) Explain the following :

- (i) Hemiptera
- (ii) Isoptera.

17. (a) Illustrate the various type of mouthparts.

Or

- (b) Explain the life cycle of Insects.

18. (a) Order the types and functions of hemocytes.

Or

- (b) Illustrate the structure of female reproductive system of insects.

Page 5 Code No. : 5457

19. (a) Predict the damages caused by *Chilo infuscatellus*.

Or

- (b) Summarize the beneficial insects.

20. (a) Design the applications of integrated pest management.

Or

- (b) Prepare an essay on the pest control through Organic compounds.
-

Page 6 Code No. : 5457

