

Reg. No. :

Name :

III Semester M.Sc. Degree (C.B.C.S.S. – OBE – Regular)

Examination, October 2024

(2023 Admission)

ZOOLOGY

Elective Course
MSZGY03 E02 : General Entomology

Time: 3 Hours

Max. Marks: 60

PART - A

Answer any five of the following. Each question carries 3 marks.

- 1. What are the key diagnostic features of Coleoptera?
- 2. Describe the role of stridulatory organs in Orthoptera.
- 3. What are the characteristics of the Apterygota group?
- Explain the structure and function of insect antennae.
- 5. Briefly describe the process of respiration in aquatic insects.6. What is the significance of galls and how do they form ?

(5×3=15)

PART - B

Answer any three of the following. Each question carries 6 marks.

- 7. Explain the mating behavior of Odonata and its evolutionary importance.
- 8. Discuss the economic importance of Lepidoptera in agriculture.
- 9. How do parasitic insects adapt their morphology to host environments?
- Create a comparison of hemimetabolous and holometabolous insect development.
- 11. Discuss the role of social organization in honey bee colonies.

 $(3 \times 6 = 18)$

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PART - C

Answer any three of the following. Each question carries 9 marks.

- Apply insect morphology to explain the role of leg modifications in predatory insects.
- Analyze the communication systems in insects and their role in colony organization.
- Compare and contrast the feeding adaptations of leaf-mining and gall-forming insects.
- Explain the role of environmental factors in the adaptations of parasitic insects to different hosts.
- Evaluate the success of biological control measures using parasitic insects, with examples from hymenoptera. (3x9=27)