

Progressive Education Society's Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16 (Autonomous)

End Semester Examination: OCT / NOV 2024 Faculty: Science and Technology

Program: B.Sc.Gen03 Semester: V SET: A Program (Specific): Zoology **Course Type: DSEC** Class: T.Y.B.Sc. Max. Marks: 35 Name of the Course: Applied Entomology Course Code: 24-ZO-351 Time: 2Hr Paper: I **Instructions to the candidate:** 1) There are 4 sections in the question paper. Write each section on separate page. 2) All Sections are compulsory. *3)* Figures to the right indicate full marks. 4) Draw a well labelled diagram wherever necessary. **SECTION: A** Q1) Multiple Choice Question 5 1. Which of the following statements is true about Entomology. (a) The study of Birds (b) The study of Insects (c) The study of Microbes (d) The study of parasitic worms 2. Which of the following is called the resting and inactive stage in the insect life cycle. (a) The Egg stage (b) The Larva stage (c) The pupa stage (d) The Adult stage 3 Insects, which feed on one type of food, are called . (a) Polyphagous (b) Monophagous (c) Entomophagy (d) None of the above 4 Insects are classified into the phylum_____. (a) Nematoda (b) Mollusca (c) Arthropoda (d) Platyhelminthes Odontotermes obesus is the scientific name of which of the following insects. (a) Termite (b) Cutworm (c) Red ant (d) Shoot borer Q2) Very short answer questions (Attempt any 4/6) 4

- 1. Define Entomology.
 - 2. Explain insect integument.
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 - 3. Describe cursorial legs of insects.
 - 4. Describe Metamorphosis
 - 5. Define insect ecology.
 - 6. Define Eusociality.



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SEC	TION: B	
 Q3) Short answer questions (Attempt any 4/6) Describe gradual metamorphosis. Write a note on mimicry in insect. Sketch and label mouth parts of insect. Describe derivatives of insect integuments. Enlist any two social insect. Write a note on haemolymph. 		8
	SECTION: C	
Q4) Short answer questions (Attempt any 4/6)	:	8

- Enlist abiotic factors of insect ecology.
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- 3. Sketch multipolar neuron.
- 4. Write a note on interspecific interactions among insects.

1. Describe holopneustic tracheal system of insect with example.

- 5. State a function of insect antennae.
- 6. Enlist two hormones of insect.

SECTION: D

Q5) Long answer type Questions (Attempt any 2/4)

10

- 1. Explain in detail economic importance of insect.
- 2. Write a note on eusociality and its significance.
- 3. With the help of schematic diagram, describe in brief digestive system of insect.
- 4. Describe social organization in termites.