

**MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE**  
**SEMESTER END THEORY EXAMINATION**

**B.Sc.(Hons.) Agriculture**

Semester	: VI (New)	Term	: Second	Academic Year	: 2023-24
Course No.	: ENTO 365	Title	: Management of Beneficial Insects		
Credits	: 2 (1+1)				
Day & Date	: Monday, 29.04.2024	Time	: 14:00 to 16:00 hrs.	Total Marks	: 40

- Note :**
1. Solve ANY EIGHT questions from SECTION 'A'.
  2. All questions from SECTION 'B' are compulsory.
  3. All questions carry equal marks.
  4. Draw neat diagram wherever necessary.

**SECTION 'A'**

- Q.1 Enlist the ideal characteristics of bioagent and describe any three of them.
- Q.2 What is Apiculture? Describe different castes of honey bee.
- Q.3 Write scientific names, host plants and significance of different types of silkworms reared in India.
- Q.4 Write cultivation of mulberry on the following points:
- a) Soil and Climatic requirement
  - b) Plantation season
  - c) Selection of planting material
  - d) Mulberry varieties
- Q.5 Write short notes on (Any Two):
- a) Uses of lac
  - b) Importance of honey bees
  - c) Voltinism in silkworm
- Q.6 Give the mass production techniques for *Cryptolaemus montrouzieri*.
- Q.7 Give the importance of beneficial insects in Agriculture.
- Q.8 Enlist important parasitoids commonly used in biological control of crop pests. Give field release technique for *Trichogramma chilonis*.
- Q.9 Give the importance of following insects in relation of Agriculture:
- a) *Campoletis chloridae*
  - b) *Epiricania melanoleuca*
  - c) *Zygogramma bicolorata*
  - d) *Goniozus nephantidis*
- Q.10 Enlist major host plants of lac insect. Give strains and crops of lac insect.

**SECTION 'B'**

- Q.11 Define the following terms:
- 1) Bee pasturage
  - 2) Mounting
  - 3) Parthenogenesis
  - 4) Scavenger insects
- Q.12 Fill in the blanks:
- 1) The days, when there is no honey flow that period is called as \_\_\_\_\_ period.
  - 2) The place where silkworm eggs are produced is called as \_\_\_\_\_.
  - 3) National Bee Board is located at \_\_\_\_\_.
  - 4) Scientific name of Mexican beetle is \_\_\_\_\_.

