Roll No. Total No. of Pages: 02

Total No. of Questions: 09

B.Voc.(Agriculture) (2018 Batch) (Sem.-2) INSECT ECOLOGY AND INTEGRATED PEST MANAGEMENT

Subject Code: BVAG-206-18

M.Code: 76178

Time: 3 Hrs. Max. Marks: 60

### **INSTRUCTIONS TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

### **SECTION-A**

#### 1. Write briefly:

- a) Diapause
- b) Classification of pest based on level of infestation
- c) What is life table and its significance?
- d) Microbial control
- e) Economic threshold level
- f) Biorational pesticides
- g) Biotic potential
- h) Transgenic plant
- i) Mixed function oxidases (MFO)
- i) Pest forecasting

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## **SECTION-B**

- 2. Define crop loss. What is the utility of estimation of crop losses in pest management? Give an outline of various methods used for relative estimates of pest populations?
- 3. Write the short notes on the following:
  - a) Neonicotinoids
  - b) Systemic insecticides
  - c) Oxadiazines
  - d) Legislative control
  - e) Botanicals
- 4. What are the advantages and disadvantages of using pheromones in pest control? Classify allelochemicals into different categories.
- 5. What are organophospates insecticides and what is their mode of action? How is it different from mode of action of carbamates?
- 6. Define mechanical control and discuss different methods of mechanical control of insects.

# **SECTION-C**

- 7. Define ecology. Describe various biotic and abiotic factors which influence the distribution and abundance of insects. Outline the structural components of an ecosystem.
- 8. Define Host plant resistance. Discuss mechanisms and basis of host plant resistance. Advantages and disadvantages of resistant varieties in IPM.
- 9. Define IPM. Discuss concepts and tools of IPM and what are the critical factors and constraints for execution of IPM programmes.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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