

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester	IV (New)	Term : II	Academic Year : 2015-16
Course No. :	ENTO 242	Title : Insect Ecology, Integrated Pest Management and Beneficial Insects	
Credits :	3 (2+1)		
Day & Date :	Wednesday, 27.04.2016	Time : 14.00 to 17.00	Total Marks : 80

- 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 diagrams wherever necessary.

SECTION "A"

- Q.1 What is pest and enlist their categories. Explain in brief the causes of pest outbreak in agro ecosystem.
- Q.2 What is pest survey and surveillance in agricultural crops? Describe in brief sampling methods of insect.
- Q.3 Enlist biotic and abiotic components of environment and explain in brief the influence of temperature on insects.
- Q.4 Enlist the components of IPM and explain in brief mechanical methods of pest control
- Q.5 What is pesticide? Give the classification of pesticides on the basis of organism and mode of entry with one example.
- Q.6 Define pesticide formulation and describe in brief types of pesticide formulation.
- Q.7 Describe mass production technique of *Trichogramma spp.* and *HaNPV*.
- Q.8 Enlist the recent methods of pest control and explain in brief antifeedant method of pest control.
- Q.9 Write short notes on (Any two).
- 1) Advantages and disadvantages of HPR
 - 2) Caste of honey bee
 - 3) Insecticide act.
 - 4) Microbial control
- Q.10 a) What is biological control? Describe in brief techniques of biological control
b) Enlist the characters of effective natural enemy.

SECTION "B"

- Q.11 Define the following terms.
- 1) Pest resurgence
 - 2) Pheromones
 - 3) Economic injury level
 - 4) Parasitoid
 - 5) LC₅₀
 - 6) Insect ecology
 - 7) Physical incompatibility
 - 8) Sericulture
- Q.12 Do as directed.
- 1) What is repellent?
 - 2) Who discovered the insecticidal property of DDT?
 - 3) What is transgenic plant?
 - 4) Give scientific name of Indian bee and rock bee.
 - 5) Give any two host plant of lac insects.
 - 6) Write full form of CIB and NCIPM.
 - 7) State any one example of sprayers and duster.
 - 8) State any two antidotes used for poisoning due to stomach poison.

