

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : IV (Old)	Term : II	Academic Year : 2017-18
Course No. : ENTO 242	Title : Insect Ecology, Integrated Pest Management and Beneficial Insects	
Credits : 3 (2+1)		
Day & Date : Friday, 27.04.2018	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 Define Integrated Pest Management (IPM). Discuss in brief concepts of IPM.
- Q.2 Give classification of insecticide based on chemical composition along with any one example.
- Q.3 Describe cultural methods of pest management with suitable examples.
- Q.4
 - a) Describe any four causes of pest outbreak in agro-ecosystem.
 - b) Explain the effect of abiotic factors on insect population.
- Q.5
 - a) Describe mass production technique of *Cryptolaemus montrouzieri*.
 - b) Explain the role of microorganisms in insect pest management.
- Q.6 Explain mechanical methods of pest control.
- Q.7 Write short notes (Any Two).
 - a) Species of honey bees
 - b) Mass multiplication of *HaNPV*
 - c) Rodent management
- Q.8
 - a) Enumerate the characteristics of ideal parasitoid.
 - b) Discuss physical methods of insect pest management.
- Q.9 Describe the importance of sericulture. Explain in brief rearing technique of mulberry silkworm for production of cocoons.
- Q.10 Describe the insecticidal formulations along with their examples.

SECTION "B"

- Q.11 Define the following terms.

1) LD ₅₀	2) Apiculture	3) ETL	4) Systemic insecticide
5) Repellent	6) Antixenosis	7) Moriculture	8) Key pest
- Q.12 Answer in one sentence.
 - 1) What is pest surveillance?
 - 2) Give any one example of insect predator.
 - 3) State the alkaloid present in neem.
 - 4) Name the antidotes for poisoning due to OP insecticides.
 - 5) What is pheromone?
 - 6) Give an example of chemosterilant.
 - 7) Name the host crops *Rangini* strain of lac insect.
 - 8) In which year the insecticides Act was passed in India?

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