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Total No. of Questions : 09

B.Sc. Agriculture (2014 & Onwards) (Sem.-4)

INSECT ECOLOGY AND INTEGRATED PEST MANAGEMENT

Subject Code : BSAG-404

Paper ID : [72756]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

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

SECTION-A

Q1. Write short notes on :

- Insecticide Act 1968.
- Classification of pest based on level of infestation.
- Control measures against rodent pests.
- Physical control of insect pest.
- Economic threshold level.
- Hibernation and Aestivation.
- Fumigants.
- Insect growth regulators.
- Chemosterilants.
- Pest forecasting.

SECTION-B

- Q2. Define host plant resistance to insects, Its major characteristics and give 2 historical examples of use of HPR in pest management.
- Q3. Define pest and briefly describe categories of pest based on their occurrence in field along with suitable examples.
- Q4. Define IPM. What is biological control and constraints in integration of biological control in IPM programmes?
- Q5. What is environmental resistance and discuss its types?
- Q6. Classify the pesticide formulations. Enumerate the salient features of liquid formulations. What is drift?

SECTION-C

- Q7. What is pest outbreak and discuss in detail causes of pest outbreak in agroecosystem.
- Q8. What is pest surveillance, its types, components of pest surveillance and its advantages?
- Q9. Write the short notes of the following insecticides :
- a) Neonicotinoids
 - b) Organochlorines
 - c) Synthetic pyrethroids
 - d) Carbamates
 - e) Botanicals