



KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Agriculture 2012 & Previous Admissions (Old Scheme)
II Semester Re- Examination-July-2017

Ento.1202 Insect Ecology and Integrated Pest Management including beneficial insects (2+1)

Marks: 80
Time: 3 hours

I Fill in the blanks: (10 x 1=10)

- 1 The first wheat variety reported as resistant to Hessian fly was -----
- 2 ----- was the first country to enact plant quarantine laws.
- 3 ----- received Nobel Prize for discovery of insecticidal properties of DDT.
- 4 The lowest level of injury where damage can be measured is called -----
- 5 ----- is known as the green muscardine fungus.
- 6 Use of light trap is an example for ----- method of pest control.
- 7 ----- is called the Father of host plant resistance.
- 8 The parasitoid used for bio control of sugarcane pyrilla is -----
- 9 The band of temperature where maximum insects of a population tend to congregate is called -----
- 10 Chloropicrin is otherwise known as -----

II Write short notes on any TEN: (10 x 3=30)

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|------------------------------------|---|
| 1 r-strategists and K-strategists. | 7 Super parasitism and multiple parasitism. |
| 2 Antixenosis and antibiosis. | 8 Contact poison and stomach poison. |
| 3 ETL and EIL. | 9 Zinc phosphide and bromadiolone. |
| 4 Allomones and kairomones. | 10 Emulsifiable concentrate and wettable powder. |
| 5 Parasitoid and predator. | 11 Rocker sprayer and garden sprayer. |
| 6 JH analogues and JH antagonists. | 12 Vertical resistance and horizontal resistance. |

III Answer any SIX: (6 x 5=30)

- 1 *Bacillus thuringiensis*.
- 2 Pheromones in pest management.
- 3 Insecticides of plant origin.
- 4 Sterile insect release technique.
- 5 International Quarantine and types of restrictions under it.
- 6 Factors affecting insect populations.
- 7 Life- table.
- 8 Potentials of IPM

IV Write essay on any ONE (1 x 10=10)

- 1 Classify synthetic insecticides based on chemical nature, list the important features of each class including the mode of action and cite an example for each class with trade name and formulation.
- 2 What is cultural control? Explain the different methods employed in cultural control with examples. What are the advantages and disadvantages of cultural control?
