

KERALA AGRICULTURAL UNIVERSITY

B.Sc. Hons (Ag) 2011 Admission IInd Semester Final Examination, August 2012

Cat. No: Ento.1202

Marks: 80

Title: Insect Ecology and Integrated Pest Management (2+1)

Time: 3 hours

I. Fill in the blanks

(10X1=10)

1. The term ' Ecology' was coined by -----
2. The movement of individuals into or out of a population is called-----
3. Oriented movement in response to light is called -----
4. The population density that can result in economic losses is called -----
5. The book ----- was written by Rachel Carson.
6. ----- is considered as the Father of host plant resistance.
7. Use of light trap is an example for ----- method in pest management.
8. *Steinernema carpocapsae* share a symbiotic relationship with the bacterium -----
9. The cochineal insect was used in India to control -----
10. Vitamin D can be used for the management of -----

II. Differentiate between the following with examples (any ten)

(10X3=30)

1. Autecology and synecology
2. Major pest and sporadic pest
3. ETL and EIL
4. Antibiosis and antixenosis
5. Super parasitism and multiple parasitism
6. Pheromones and kairomones
7. Contact poisons and stomach poisons
8. Emulsifiable concentrate and soluble concentrates
9. Pneumatic sprayers and hydraulic sprayers
10. Repellants and antifeedants
11. Adjuvants and antidotes
12. Insecticide resistance and resurgence

III. Write short essays on any five of the following

(5X6=30)

1. Factors influencing population of an organism
2. Mass multiplication of Trichogramma wasps
3. Transgenics in pest management
4. Entomopathogenic fungi
5. The Insecticide Act, 1968
6. Sterile Insect Technique
7. Botanical insecticides.

IV. Answer any one of the following

(1X10=10)

1. Classify synthetic insecticides based on the chemical nature, giving mode of action and an example for each class.
2. Discuss the potential and limitations of IPM