

KERALA AGRICULTURAL UNIVERSITY
B.sc (Hons) Ag 2015 Admission
1st Semester Final Examination-March-2016

Cat. No: Ento.1101

Marks: 50.00

Title:- Insect morphology, physiology and systematics (2+1)

Time: 2 hours

I Answer all the questions:

(10 x 1=10)

1. The outer non-cellular layer is _____
2. Horse-shoe crabs belong to the order _____
3. Cerci are unsymmetrical in males of _____
4. Lepidopteran family which has only 4 functional legs are _____
5. Tympanum is an _____ organ

Whether True or False

6. Book lice belongs to the order Psocoptera
7. The sub family ends with ini
8. Multi-cellular movable structure is spur
9. Define Morphology
10. Define Systematics

II Write short notes any FIVE questions

(5 x 2=10)

1. Types of larvae
2. Give differences between Tachinidae and Tabaniae
3. Give characteristics of Membracidae
4. Mandibulo-suctorial type of mouth parts
5. Modifications in leg
6. Draw a labeled sketch of digestive system
7. Insects of aesthetic value

III Write short notes on any FIVE questions

(5 x 4=20)

1. Explain modification in wings
2. Write about structure and function of excretory system
3. Explain about special modes of reproduction
4. Order Diptera and its key characters
5. Give about 5 important families in Coleoptera with its key character
6. Write about external features of grasshopper
7. Write about embryology and development of insects

IV Answer any ONE of the following

(1 x 10=10)

1. Explain about methods of collection and preservation of insects
2. Give a detailed account about the Order Lepidoptera