

KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Ag. 2014 and Previous Admission
Ist Semester Final Examination- February-2015

Cat. No: Ento.1101

Marks: 50

Title: Insect Morphology ,Physiology and Systematics (2+1)

Time: 2 hours

I) Fill up the blanks

(10 x 1=10)

- ✓1. The first entomologist to the Government of India was _____
- ✓2. The cellular part of insect integument is _____
- ✓3. The feather like antenna is termed as _____

Match the following

- | | |
|---------------|--------------|
| 4. Chrysalis | -Blood gills |
| 5. Chironomid | -Symphyta |
| 6. Sawfly | -Obtect pupa |

State True or False

- ✓7. The forewing of plant bug is elytra
- ✓8. Right mandible is absent in thrips
9. The compound eyes perceive changes in light intensity

Define

10. Apolysis

II Write short notes on any FIVE

(5 x 2=10)

- ✓1. Characteristics of the class Crustacea
- ✓2. Structure of grasshopper ovipositor
3. Alpha taxonomy
- ✓4. Characteristics of Meloidae
5. Blastokinesis
6. Jugate wing coupling
7. Merocrine secretion

III Write short essays on FIVE of the following

(5 x 4 =20)

1. Enumerate the factors for insect abundance and success
- ✓2. Enumerate the modifications of insect legs
- ✓3. Draw the structure of insect digestive system and label the parts
- ✓4. Characteristics and economic importance of the families Gryllidae and Gryllotalpidae
- ✓5. Differentiate diapauses and quiescence

6. List out the families of parasitoids under the orders Hymenoptera and Diptera with suitable examples

7. Describe the process of moulting with suitable sketches

IV Write essay on ANY ONE

(1 x 10=10)

✓ 1. Structure and function of Circulatory and excretory system

2. Characteristics of the order Lepidoptera with families of Agricultural Importance
