

KERALA AGRICULTURAL UNIVERSITY

BS.c (Hons) Agriculture 2013 Admission

VIIth Semester One Time Re-Examination-February 2017

Cat. No: Ento.1101

Marks: 50

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

Time : 2 hours

I. Fill in the blanks/Define/True or False:

(10 x 1=10)

1. ----- is the largest phylum in invertebrate.
2. The wing bearing thoracic segment is collectively called as -----
3. Sea spiders belong to the class -----
4. Hind tibia with two rows of spine is seen in the family -----
5. Forceps like anal cerci is seen in -----
6. Filter chamber is seen in -----
7. Taenidia are thread like spiral thickenings present in -----
8. Define metamorphosis.
9. Define systematics
10. Inverted "Y" shaped suture is post- occipital suture. (T/F)

II. Write short notes/answers on ANY FIVE:

(5x 2=10)

1. Hamulate wing coupling.
2. Tachinidae- Key characters.
3. Give the list of parasitoid families in order Hymenoptera with examples.
4. Leg modification in honey bees.
5. Explain Hermaphroditism.
6. Draw a labelled sketch of circulatory system.
7. Give about Dictyoptera.

III Write answers on ANY FIVE:

(5 x 4=20)

1. Structure and modification of insect antenna.
2. Structure and modification of reproductive system in insects.
3. Write about insect sense organs.
4. Write about modification of abdomen in insects
5. Types of metamorphosis.
6. Write about structure of insect head.
7. Factors for insect abundance.

IV. Write essay on any ONE

(1 x 10=10)

1. Explain about the steps in moulting process.
2. List important families in Hemiptera and give its key characters.
