



KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Ag. 2018 admission
II Semester Final Examination-July-2019

Ento.1201

Fundamentals of Entomology (2+1)

Marks: 50
Time: 2 hours

I

Fill in the blanks

(10x1=10)

- 1 Solid invagination of insect body wall is called as.....
- 2 insect male and female gonads are present in one organism.
- 3 is a anti JH which induce precocious metamorphosis and death in insects.
- 4 The name that are followed in the generic name in ICZN is called as.....

Choose the correct answer

- 5 Example of bipectinate antenna
a Female arctid moth and skipper b Male lymantrid moth and mulberry silk moth
c Male mosquito and skipper d Female and male mosquito
- 6 Insect blood of phytophagous insects rich in
a Na b K c P d Ca
- 7 Which one of the following is **Incorrect** with respect to the types of reproduction.
a The ability of female to reproduce without fertilization is called Parthenogenesis.
b The immature insect gives birth to youngones are called neoteny.
c Reproduction where insects reproduce by giving birth to two or more young ones instead of a single one is called as Hemaphorditism.
d Example of Haemocoelous viviparity is Strpsipterans.

State True or False

- 8 Hamula is a third abdominal sternite in collembola.
- 9 Plume moth forewings are elongate with six to seven fissure.

Define

- 10 Taenidia.

II

Write Short notes on ANY FIVE of the following

(5x2=10)

- 1 Explain the wing coupling mechanism with examples.
- 2 Enlist the types of pupae with suitable examples.
- 3 Write the characters of insecta.
- 4 Differences between heteroptera and homoptera.
- 5 Explain about Diastole.
- 6 Differences between moths and butterflies.
- 7 Enlist the characters of Dictyoptera.

III

Answer ANY FIVE of the following

(5x4=20)

- 1 Explain three regions of digestive system.
- 2 Describe abdominal appendages in immature insects and winged adults.
- 3 What is insect moulting? Write down the steps during moulting process.
- 4 Write the characters of order Diptera. Explain two family characters of dipteran insects.
- 5 Enlist the characters of Isoptera order.

P T O