

M.Sc.(Ag.) Examination, 2019
Semester-II
Agricultural Entomology
Course : AEN-503
(Insect Taxonomy)

Time : 3 Hours

Full Marks : 50

Questions are of value as indicated in the margin.

Answer **any five** questions

1. Define “Systematics” and “Taxonomy”. What are the three basic types of classification?
State the problems encountered in insect identification. 3+3+4=10
2. Describe the taxonomic characters of order Coleoptera. Give an account of suborders under this order with examples. 6+4=10
3. Write the characters of **any four** of the following families. 2.5×4=10
 - a) Tettigoniidae
 - b) Pseudococcidae
 - c) Termitidae
 - d) Bostrychidae
 - e) Tachinidae
 - f) Formicidae
4. Give an account of order Lepidoptera. Differentiate between moths and butterflies.
Write the characters of *any two* families one each having beneficial and harmful role. 4+2+4=10
5. Write the taxonomic characters of the families to which the following insects belongs to
(**any five**) : 2×5=10
 - a) *Nephotettix virescens*
 - b) *Diaphorina citri*
 - c) *Aphis gossypii*
 - d) *Xanthopimpla punctata*
 - e) *Sitophilus oryzae*
 - f) *Apis indica*
6. Write short notes on **any four** of the following : 2.5×4=10
 - a) Reasons of dominance of class Insecta
 - b) Dictyoptera
 - c) Dichotomous key
 - d) Components of Biological Classification
 - e) International Code of Zoological Nomenclature

P.T.O.

(2)

f) Hierarchic classification

7. Differentiate **any four** of the following :

2.5×4=10

- a) Symphyta and Apocrita
- b) Holotype and Paratype
- c) Nematocera and Brachycera
- d) Coccinellidae and Scarabaeidae
- e) Reduviidae and Delphacidae

8. Write notes on **any two** of the following :

2×5=10

- a) Thysanoptera
 - b) Neuroptera
 - c) Strepsiptera
 - d) Thysanura
-