

Roll No.

Total No. of Pages : 02

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B.Sc. (Agriculture) (Sem.-2)
FUNDAMENTALS OF ENTOMOLOGY

Subject Code : BSAG-207-19

M.Code : 77668

Date of Examination : 16-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.

SECTION-A

1. Write short notes on :

- a. Who was H.M. Lefroy and what is his contribution to the Indian entomology?
- b. Write any five characteristics made insects more dominant species on the earth.
- c. Define moulting. How the expansion of cuticle takes place?
- d. Briefly describe about 3 types of heads based on orientation with respect to the insect body.
- e. Write short note on chewing and siphoning type mouth parts with one example.
- f. Define wing venation. What are major modifications of insect wings?
- g. How will you differentiate an insect larva and nymph?
- h. What is filter chamber and write its brief significance in insects?
- i. Name organs constituting excretory system with its functions in insects.
- j. List various female reproductive organs in insects. Give brief about any one organ.

SECTION-B

2. Classify pest population estimation methods into various categories. Explain various methods used for absolute estimates of pest population.
3. Differentiate ecosystem and agro ecosystem. Who gave term ecosystem? Also describe structural components of an ecosystem.
4. Define systematics. Give objectives of insect classification. How systematics does differ from taxonomy, classification and identification?
5. Explain distinguishing characters of orders Hymenoptera and Coleoptera. Give salient features of any three families with examples in each.
6. Describe different stages involved in the evolution of insects.

SECTION-C

7. Define insect ecology. Elaborate the role of various biotic and abiotic factors on the pest population.
8. Describe different types of insect antennae with at least two examples. What are functions of antennae?
9. Give taxonomic division of American bollworm as per phylum arthropoda. What are those characteristics which made insects adapted so nicely to inhabit in every corner of the earth?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.