



বিদ্যাসাগর বিশ্ববিদ্যালয়

**VIDYASAGAR UNIVERSITY**

**B.Sc. (Honours) in AGRICULTURE  
2nd Semester Examination 2022**

**PAPER—AGS-207**

**FUNDAMENTALS OF ENTOMOLOGY**

*Full Marks : 50*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

1. Answer any *ten* questions. 10×2
- (a) Write the characters of class Insecta with example.
- (b) Comment on any one reason behind the dominance of insects.
- (c) Distinguish between harmful and beneficial insects.
- (d) Write the chemical composition of cuticle in insects.
- (e) Mention the characteristics of the order coleoptera with example.

- (f) What is opisthognathous head? Give example.
- (g) Comment on the typical mouth parts of an insect.
- (h) What are capitate and filiform antennae? Give examples.
- (i) What is fossorial type of leg? Mention its functions.
- (j) What is the function of corpora cardina in insects?
- (k) What is the function of proventriculus in insects?
- (l) State any two rules of Binomial Nomenclature.
- (m) What is the function of trachea in insects.
- (n) Name any two members of agricultural importance under order orthoptera.
- (o) What is fungus garden?

**2.** Answer any six questions. 6×5

- (a) Discuss the economic importance of different species of locust.
- (b) Write a short note on moulting in insects.
- (c) Distinguish between intestinal and extraintestinal digestion in insects. Describe clypeolabral suture of insect head with proper diagram.  $2\frac{1}{2}+2\frac{1}{2}$
- (d) Write a short note on chemical composition of haemolymph.

- (e) Discuss the hormonal control of meta morphosis in insects.
- (f) How termites are harmful to us? State the economic importance of odonate insects. 2+3
- (g) Write a note on piercing and sucking type of mouthparts in insects. Comment on vitellogenesis in insects. 3+2
- (h) Write a note on different respiratory structures in terrestrial insects.
- (i) Describe the structure and function of compound eye in insects with necessary diagram.
- (j) Comment on the medical importance of housefly and mosquito.  $2\frac{1}{2}+2\frac{1}{2}$
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