

2023

AGS 2nd Semester Examination

B.Sc. Hons. in Agriculture

Fundamentals of Entomology

PAPER — 207

Full Marks : 50

Time : 2 hours

The figures in the right-hand margin indicate marks.

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

Illustrate the answers wherever necessary.

Answer from **all** the Groups as directed.

GROUP—A

1. Answer *any* **five** questions from the following :
2×5=10

✓(a) Write down the important characters of Class Insecta with examples.

(2)

- ✓(b) What is bursa copulatrix?
- ✓(e) Comment on the function of insect cuticle.
- ✓(d) Comment on the role of mosquitoes in disease transmission
- (e) What is ommatidium?
- (f) What is corpora allata?
- (g) What is clypeolabral suture?
- ✓(b) What are the important identifying characters of order Orthoptera?

GROUP—B

2. Answer *any four* questions from the following :
5×4=20

- ✓(a) Write a note on harmful and beneficial insects with example.
- (b) Discuss about the different structural modifications of insect leg with examples.
- ✓(c) Write short note on peritrophic membrane and filter chamber in insects.

(3)

✓ (d) Add a note on apposition and superposition images.

(e) Describe moulting in insects.

✓ (f) State the composition of haemolymph in insects.

GROUP—C

3. Answer *any two* questions from the following :

10×2=20

✓ (a) Describe the hormonal control of insect metamorphosis with necessary diagrams. What is the function of wax layer in insect integument? 8+2=10

✓ (b) Draw a flowchart classifying class insecta upto order level. What is filiform antenna? Give example. 8+2=10

(c) Write the reasons behind the success and evolution of insects on earth. What are the types of diapauses in insects? 7+3=10

(d) Write down the general characters and describe the different castes of order Isoptera. 10

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