

AQ - 992

Third Semester M.Sc. - II Examination

ZOOLOGY

Paper - XII

Elective Paper : Entomology - II
(Insect Anatomy and Physiology)

P. Pages : 3

Time : Three Hours]

[Max. Marks : 80

- Note :** (1) All questions are compulsory.
(2) All questions carry equal marks.
(3) Draw labelled diagrams wherever necessary.

1. Explain the following :—

- (a) Types of Aaemocytes.
- (b) Digestive enzymes.
- (c) Course of circulation.
- (d) Goblet cells.

OR

- (e) Functions of haemocytes.
- (f) Fat-body.
- (g) Absorption mechanism.
- (h) Digestion of proteins and fat.

2. Give an account of structure and modification in Excretory system in insect.

OR

Explain the physiology of Respiration in insect with reference to tracheal system. 16

3. Describe the structure and modification of Nervous system.

OR

Production of receptor potentials in different types of Sensilla. 16

4. Explain the following :—

- (i) Ring gland complex in Diptera.
- (j) Neurosecretory cell.
- (k) Testis structure.
- (l) Types of ovary.

OR

- (m) Accessory reproductive glands in female.

- (n) Accessory reproductive glands in male.
- (o) Exocrine glands.
- (p) Corpora cardiaca. 16

5. Explain the following :—

- (q) Control of metamorphosis.
- (r) Types of larvae.
- (s) Structure and composition of egg.
- (t) Diapause.

OR

- (u) Regulation of moulting.
- (v) Polyphenism.
- (w) Significance of cuticle
- (x) Types of Pupae. 16

