

PE – 511
(554) M.SC. ZOOLOGY (FOURTH SEMESTER)
Examination JUNE- 2022
Compulsory/Optional
Group -
Paper -III

Name/Title of Paper – ENTOMOLOGY
Time : Three Hours]

[Maximum Marks : 080
[Minimum Pass Marks : 29

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

Q.1 Attempt following question :- 1x10

- (a) Which insect order have wings clothed hair.
- (b) What is halteres ? Give an example of insect order in which halteres are present.
- (c) Give two characteristic feature of thysanoptera
- (d) What the endoskeleton of Had region is called.
- (e) Which is dioptric apparatus of compound eye.
- (f) What is spiracular trachea .
- (g) Define thelytoky.
- (h) Name Neurohemal organ of insects.
- (i) Give an example of Eruli form larva.
- (j) Write function of Goblet cells of midgut.

Q.2 Answer the following questions :- 2x5

- (a) Give brief account of structure of tentorium.
- (b) Describe structure of typical insect leg.
- (c) What is cryptonephridia & what is its significance.
- (d) What is Apodemes and its function.
- (e) How Plastron layer helps in aquatic respiration in insects.

Section-B

Answer the following question :- 15x4

Q.3 Describe structure of insects head and theories of Head segmentation.

OR

Describe structure of insects integument and chemical composition of and biosynthesis of chitin

Unit-II

Q.4 Describe structure of alimentary canal in insects and physiology of digestion.

OR

Give account of respiration in terrestrial insects.

Unit-III

Q.5 What is mechanoreceptor describe mechanoreceptor in insects.

OR

Define Bioluminescence. Describe structure of light producing organs and physiology of light production.

Unit-IV

Q.6 Describe structure of female reproductive system in insects with special reference to various types of ovaries.

OR

Give a detail account on types of larva. Explain in giving examples.