

PC – 511 CV-19
(554) M.Sc. ZOOLOGY (FOURTH SEMESTER)
Term End Examination JUNE 2020
Compulsory/Optional Group
Paper -II
Entomology

Time : Three Hours]

[Maximum Marks : 080

नोट :- दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।
Note : Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

SECTION - A

1. Attempt the following question 1X10
- (a) How many numbers of segments are present in head of insect?
(b) Name the region of thoracic segment to which wings is not attached.
(c) Which type of antenna is found in termite?
(d) What is the basis of contraction of insect heart?
(e) Name the Principle excretory organ in insects.
(f) What is the unit of insect eye?
(g) What is the name of stridulatory organs in house cricket?
(h) What is scientific name of the light producing insect?
(i) How many number ovarioles are present in an ovary of insect?
(j) Give an example of insect produced parthenogenetically?
2. Answer the following questions: 2X5
- (a) What is tagmosis?
(b) How aquatic insects respire under water?
(c) Why insect blood is termed as haemolymph?
(d) Write about insect brain.
(e) Write the importance of Juvenile hormone in insects.

SECTION - B

Answer the following questions: 15X4

Unit - I

3. Describe the typical insect leg and also write about its modifications with suitable figures.

OR

Explain the structure of integument along with process of sclerotization.

Unit - II

4. Describe the blood circulation in an typical insect supported with suitable figure.

OR

Describe the digestive system of an insect along with physiology of digestion.

Unit - III

5. Write a detail account on the photoreception in insects.

OR

Describe the structure of bioluminescent organ and physiology of bioluminescence.

Unit - IV

6. What is metamorphosis? Describe its types and significance.

OR

Describe the endocrine system of insect and its importance in moulting.