2021 M.Sc Third Semester DSE – 01 ZOOLOGY Course Code: MZOD 3.11 (D) (Entomology - I)

Total Mark: 70 Time: 3 hours Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

- With suitable diagrams explain the structure and modification insect antennae. 4+10=14
- Explain the various parts of generalized insect legs. Add a note on its modification.
 5+9=14

UNIT-II

- 3. Write the role of malpighian tubule in insect. Add a note on nitrogenous waste in respect to terrestrial insect. 10+4=14
- 4. Explain the alimentary canal and digestive glands associated in detail.

9+5=14

UNIT-III

5. Discuss the various parts of brain and ventral nerve cord of insect.

8+6=14

6. Write the role of corpora allata, corpora cardiaca and prothoracic gland as an insect endocrine gland. 14

UNIT-IV

- 7. Explain the immune activity of haemocytes. 14
- 8. Briefly explain the proline and trehalose metabolism in insect. 7+7=14

UNIT-V

- 9. Explain the metamorphosis and immature stages in insects. 14
- 10. Describe the biosynthesis and mode of action of ecdysteroid. 7+7=14