

D 6731

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Name.....

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2016

(CUCSS)

Zoology

ZO3 ET 08—ENTOMOLOGY I—MORPHOLOGY AND TAXONOMY

Time : Three Hours

Maximum : 36 Weightage

I. Answer all *fourteen* questions :

- 1 What is sub genital plate ?
- 2 Write notes on Lace wings.
- 3 Describe the different types of larvae in Lepidoptera.
- 4 Distinguish between prognathous and hypognathous head.
- 5 Explain spinning glands of Embioptera.
- 6 What are gall wasps ? Give examples.
- 7 What is periproct ?
- 8 Comment on wingless insects.
- 9 What are Antlions ? Write notes on their metamorphosis.
- 10 List out the diagnostic features of Ephemeridae.
- 11 Write notes on thoracic segmentation of insects.
- 12 What are scorpion flies ? Why are they called so ?
- 13 Write notes on hawk moths.
- 14 Substantiate how the morphology of honey bee worker is adapted for its mode of life.

(14 × 1 = 14 weightage)

II. Answer any *seven* questions :

- 15 Write down the diagnostic features of Scarabaeidae.
- 16 Explain wing coupling mechanism in Lepidoptera.
- 17 Write notes on fossil insects.
- 18 Comment on tympanal organs of Orthoptera.
- 19 Describe the mouthparts of Diptera.
- 20 Explain respiration in aquatic insects.

Turn over

- 21 Comment on the biology and habits of Psocoptera.
- 22 Discuss the economic importance of leaf mining insects.
- 23 Explain feeding mechanism in Heteroptera.
- 24 Comment on the biology of Strepsiptera.

(7 × 2 = 14 weightage)

III. Answer any *two* questions :

- 25 Make a critical account on the various theories of head segmentation in insects.
- 26 Classify Isoptera up to families citing the diagnostic features of each family.
- 27 Substantiate the role of pheromones in insect communication.
- 28 Explain the structure, function and diversity of antennae in insects.

(2 × 4 = 8 weightage)