

B.Sc. 3rd Semester (Hons.) Examination, 2021 (CBCS)

Subject: Zoology

Paper: SEC-T-I

(Apiculture)

Full Marks: 40

Time: 2 Hrs

Candidates are required to give the answers in their own words as far as practicable.

Answer any **eight** questions of the following:

5×8 = 40

1. Write a short note on the social organization of bee colony.
2. Describe the structural organization of Langstroth hive with a labeled diagram.
3. How honey is extracted? Describe any one of the modern methods for extraction of honey.
4. Write down the names of different equipments for bee keeping and mention their uses for the same.
5. Mention the scientific names of three species of bee enemies with a note on their control measure.
6. Write short notes on the following (any two):
 - (a) Bee Wax
 - (b) Propolis
 - (c) Bee bread
7. How do the bees contribute to advanced horticultural practices?
8. State the composition of honey with its medicinal importance.
9. Mention the important characteristics that involve selection of bees for apiculture.
10. Discuss in brief the Waggle dance of bees.

Paper: SEC-T-4
(Sericulture)

Full Marks: 40

Time: 2 Hrs

Candidates are required to give the answers in their own words as far as practicable.

Answer any **eight** questions of the following:

5×8 = 40

1. State importance of Sericulture in India.
2. Write down the scientific names of four silkworms found in India and the types of silk produced by those species.
3. Draw and describe a 5th instar larva of *Bombyx mori*.
4. Write a short note on Voltinism.
5. Compare uni-, bi- and multi-voltine races of mulberry moth.
6. Write the characteristic features and chemical nature of fibroin and sericin.
7. What are the precautions to be taken before and during rearing of mulberry silkworms?
8. Discuss the procedure for extraction of silk from cocoon.
9. Briefly describe one protozoan and one bacterial diseases of silkworm with their control measures.
10. Name two pests of silkworm and describe the nature of damages caused by those.
