

B. Sc. 3rd SEMESTER

SKILL ENHANCEMENT COURSE (SEC)

ZOO318S1: APICULTURE

Credits 4 (Theory: 2; Practicals: 2)

THEORY (2 CREDITS)

Unit I: Bee Keeping I (15 Hours)

- 1.1 Introduction to Apiculture, honey bee species
- 1.2 Social organization of bee colony
- 1.3 Life cycle of honey bee
- 1.4 Behavioural patterns (bees dance, swarming)

Unit II: Bee Keeping II (15 Hours)

- 2.1 Methods of bee keeping, beehive and its types
- 2.2 Bee foraging and production of honey
- 2.3 Bee keeping products: honey and bee wax
- 2.4 Enemies and diseases of honey bees

PRACTICAL (2 CREDITS) (60 Hours)

1. Specimen study of different castes of honey bee species
2. Collection and identification of different honey bee species *Viz. Apis indica, A. dorsata, A. mellifera, A. Florae*
3. *Life cycle study of honey bees*
4. Study of leg modification in workers
5. Temporary mount preparation of mouth parts of honey bees
6. Temporary mount preparation of sting apparatus of honey bees
7. Demonstration of honey testing methods like blot method, burning method and alkali method etc.
8. Study of different bee hives and allied implements used in bee keeping

SUGGESTED READINGS

- 1) Prost, P. J. (1962). *Apiculture*. Oxford and IBH, New Delhi.
- 2) Bisht D.S., *Apiculture*, ICAR Publication.
- 3) Singh S., *Beekeeping in India*, Indian council of Agricultural Research, New Delhi