

PAPER: ZOOL-IDC 406
(Inter Department Course / Open elective)

ECONOMIC ZOOLOGY

50 marks

3 CH

Objectives

- To understand the cultivation of honeybee, extraction of honey and honeybee products.
- To understand the culture and rearing of silk worm.

Learning Outcome

The students will be able to understand development of sericulture and apiculture for sustainable growth and generation of gainful employment. The course will motivate the learners to be self-employed through sericulture and apiculture.

Unit I: Apiculture

History, Biology of honey bee species. Social organization of honey bee. Bee hive, flora for apiculture. Method of bee keeping and indigenous method of extraction of honey.

Unit II: Apiculture

Modern methods of apiculture, applications for modern method. Products of bee keeping: Honey, bee wax, chemical composition and economic importance of honey bee wax. Bee keeping industries. Modern method in employing honey bees for cross pollination in horticultural garden.

Unit III: Sericulture

Sericulture: Definition, history and present status. Types of silkworms, distribution and races. Exotic and indigenous races. Mulberry and non-mulberry sericulture. Selection of mulberry variety and establishment of mulberry garden. Rearing house and rearing appliances. Silkworm rearing technology: early age and late age rearing. Spinning, harvesting and storage of cocoons. Prospectus of sericulture in India.

Sericulture industries in different states, employment, potential in mulberry and non mulberry sericulture.

SUGGESTED READINGS

- Manual on sericulture; Food and agricultural organization, Rome 1976
- Handbook of Practical Sericulture: S. R. Ullal and M.N. Narasimhanna CSB, Bangalore.
- Handbook of silkworm rearing: Agriculture and Technical Manual-1, Fuzi Pub Co Ltd, Tokyo, Japan 1972.
- Prost, P.J. 1962. Apiculture, Oxford and IBH, New Delhi.
- Bisht DS. Apiculture, ICAR publication.