

**DISCIPLINE SPECIFIC ELECTIVE COURSE**  
**BZO: E502 ECONOMIC ZOOLOGY**  
**(Credits: Theory-4)**

**SEMESTER – V**

**LECTURES: 60**

**Unit 1**

Apiculture (Bee-keeping)

Introduction, Varieties of honey bees and Bee pasturage; Setting up an apiary: Langstroth's/Newton's hive, bee veil, brood and storage chambers, iron frames and comb sheets, drone excluder, rearing equipments, handling of bees, artificial diet; Economy

**Unit 2**

Sericulture

Introduction, Different types of silk and silkworms in India; Rearing of *Bombyx mori* – Rearing racks and trays, Chawki rearing, bed cleaning, montages, harvesting of cocoons; Silk reeling techniques and their management

**Unit 3**

Lac Culture

Introduction, Life History of *Tachardia lacca*, Host plants for Lac cultivation, Cultivation of lac, Different types of Lacs and Lac production, Lac industries in India

**Unit 4**

Livestock Technology

Introduction, Dairy Industry, Poultry industry, Piggery and their production and economics

**Unit 5**

Aquaculture

Introduction, Pearl culture, Prawn culture, and Fresh water fish culture, and their production and economics

**SUGGESTED READINGS**

1. Prost, P. J. (1962). *Apiculture*. Oxford and IBH, New Delhi.
2. Sericulture, *FAO Manual of Sericulture*.
3. Hafez, E. S. E. (1962). *Reproduction in Farm Animals*, Lea and Fabiger Publishers.
4. Srivastava, C. B. L. (1999). *Fishery Science and Indian Fisheries*. Kitab Mahal publications, India.
5. Sardar Singh, *Beekeeping in India*, Indian council of Agricultural Research, New Delhi.
6. Singh Bisht, *Apiculture*, ICAR Publication.
7. Knobil, E. and Neill, J. D. (2006). *The Physiology of Reproduction*, Vol. 2, Elsevier Publishers.
8. Dunham R. A. (2004). *Aquaculture and Fisheries Biotechnology - Genetic Approaches*. CABI publications, U.K.