

Semester-V

Skill Enhancement Course (SEC)

Sericulture

Theory

(Credits 4)

Unit 1: Introduction

Sericulture: Definition, history and present status, Silk Route, Types of Silkworms, Distribution and races (exotic and Indigenous); Mulberry and non- mulberry Sericulture.

(12 periods)

Unit 2: Biology of Silkworm

Life cycle of *Bombyx mori* with hormonal control; Structure of silk gland and secretion of silk; Pests of Silkworm; Pathogenesis of silkworm diseases (protozoan, viral, fungal and bacterial); Control and Prevention of pests and diseases.

(18 periods)

Unit 3: Rearing of Silkworms

Selection of mulberry variety and Moriculture (methods and practices); Diseases of Mulberry; Rearing house and rearing appliances; (disinfectants, formalin, bleaching powder, RKO); Silkworm rearing technology; early age and late age rearing; Types of montages; Spinning, Harvesting and storage of cocoons.

(20 periods)

Unit 4: Entrepreneurship in Sericulture

Prospects of sericulture, sericulture industry in different states, employment potential in mulberry and non mulberry sericulture.

(10 periods)

Field work: Visit to sericulture centre/silk factory and submission of project report with presentation.

Suggested Readings

- *Handbook of Practical Sericulture*, S. R Ullal and M. N Narasimhanna, CSB, Bangalore.
- *Appropriate Sericultural Techniques*, E d, M. S Jolly, Director, CSR and TI, Mysore.
- *Handbook of Silkworm Rearing*, Agriculture and Technical Manual-1, Fuzi Pub.co, Ltd. Tokyo, Japan 1972.
- *Manual of Silkworm Egg Production*, M. N Narasimhanna, CSB, Bangalore 1988.
- *Silkworm Rearing*, Wupang- Chun and Chen DA- Chung, Pub. By FAO, Rome 1988.
- *A guide for Bivoltine Sericulture*, K. Sengupta, Director, CSR and TI, Mysore 1989.
- *Improved method of Rearing Young age Silkworm*, S. Krishnaswamy reprinted, CSB, Bangalore, 1986.