

B. Sc. General 6th Semester

ZOOLOGY

Skill Enhancement Course (SEC)

ZO617S: SERICULTURE

Credits 4 (Theory: 2; Practicals: 2)

Theory (2 Credits)

Unit I: Sericulture I (15 Hours)

- 1.1 Past, present and future of sericulture in J & K
- 1.2 Sericulture and its components
- 1.3 Life cycle of mulberry silk moth-*Bombyx mori*
- 1.4 Life cycle of non-mulberry silk moths-Tasar, Muga and Eri

Unit II: Sericulture II (15 Hours)

- 2.1 Rearing of silk worms- mulberry and non-mulberry silk worms
- 2.2 Harvesting and post harvest processing of cocoons
- 2.3 By-products of sericulture
- 2.4 Silkworm diseases- viral, bacterial, protozoan and fungal

Practical (2 Credits) (60 Hours)

1. Specimen study of mulberry and non-mulberry silk moths
2. Life cycle study/laboratory rearing of *Bombyx mori*
3. Study of silk gland of *Bombyx mori* through the dissection of 5th instar silkworm
4. Demonstration of cocoon reeling and determination of filament length of cocoons
5. Mother moth and seed examination
6. Visit to any sericultural research institution

SUGGESTED READINGS

1. Handbook of Practical Sericulture: S.R. Ullal and M.N. Narasimhanna CSB, Bangalore
2. Appropriate Sericultural Techniques; Ed. M. S. Jolly, Director, CSR & TI, Mysore.
3. Handbook of Silkworm Rearing: Agriculture and Technical Manual-1, Fuzi Pub. Co. Ltd., Tokyo, Japan 1972
4. Manual of Silkworm Egg Production; M. N. Narasimhanna, CSB, Bangalore 1988
5. Silkworm Rearing; Wupang—Chun and Chen Da-Chung, Pub. By FAO, Rome 1988
6. Improved Method of Rearing Young age silkworm; S. Krishnaswamy, reprinted CSB, Bangalore, 1986