B.Sc. 1st Semester (Sericulture)

SEMESTER- 1
Core course: Paper-I
General Sericulture and Mulberry production
(Credits: Theory-04, Practical-02)

THEORY

Unit 1: INTRODUCTION

1. Sericulture: Definition, history and present status.
2. Silkworms: Types of silkworms, life cycle and their food plants.
3. Prospects and problems of sericulture
4. Role of women in sericulture

Unit 2: MULBERRY CULTIVATION-1

1. Morphology, Taxonomy of mulberry and popular mulberry cultivars; Morus alba, Morus indica, Morus cerata.
2. Anatomy of root, stem and leaf.
3. Economical importance of mulberry other uses and medicinal value.
4. Common weeds of mulberry ï their effects on mulberry productivity

Unit 3: MULBERRY CULTIVATION-II

1. Propagation of mulberry- Sexual and asexual propagation techniques.
2. Pruning : Bottom pruning, middle pruning and repeated pruning
3. Use of growth regulators in mulberry propagation.
4. Leaf yield : Estimation of leaf yield per unit area-acre/hectare

Unit 4: ESTABLISHMENT AND MANAGEMENT OF MULBERRY GARDEN

1. Land preparation: Soil, leveling and ploughing.
2. Plantation methods : Row and pit systems
3. Irrigation: Drip irrigation, sprinkler irrigation, flood irrigation, weeding
4. Manuring: Organic, inorganic and biofertilizer

PRACTICALS

GENERAL SERICULTURE-MAPS AND RECORDS:

a) Study of different life stages of *Bombyx mori* L
b)Preparation of a map showing extension of sericulture in the world.
c) Preparation of a map showing extension of sericulture in India.
d) Graphical representation of cocoon and silk production by various silkworms in India.
e) Graphical representation of earning from indigenous market and export of silk goods.
f) Visit to various sericulture centers of state and southern India.

MORICULTURE:

a) Soil sampling and analysis of pH and moisture content.
b) External morphology of root, stem and leaf.
c) Anatomy of root, stem and leaf.
d) Methods of propagation by cutting and grafting
e) Farm implements
f) Determination of water holding capacity