

CERTIFICATE COURSE IN SERICULTURE

(Non-Semester)

(With effect from the academic year 2013-14)

Eligibility for the Course

Candidates for admission to Certificate course in Sericulture could possess a Higher Secondary school Education in Science subjects with Biology

Duration of the Course

One year Certificate course in Sericulture course non-semester for One Year duration

Examination

All the theory papers are of 3 hours duration each for a maximum of 100 marks with a passing minimum of 35 marks. Practical examinations are also for 3 hours duration for a maximum of 100 marks and a passing minimum of 35 marks.

Question Paper Pattern

Maximum marks: 100

Time: 3 hours

Part A (5 x 3 = 15)

Five short answer questions (One question from each unit)

Part B (5 x 8 = 40)

Paragraph questions (Total questions 8, out of which answers are to be given for any five questions;

Part C (3 x 15 = 45)

Total questions 5, out of which answers are to be given for any Three questions;

S.No	Theory & Practicals	Maximum Marks	Minimum Marks
1.	An Introduction To Sericulture	100	35
2.	Management And Marketing Of Sericulture	100	35

PAPER-I: AN INTRODUCTION TO SERICULTURE

UNIT I- MORPHOLOGY OF MORICULTURE

Mulberry – Origin and distribution – Morphology of mulberry plant – Nutritional value of mulberry leaves. Planting system - Irrigation – Manuring – Weeding - Interalteration - Mulching – Pruning and Harvesting.

UNIT II – PROPAGATION OF MULBERRY PLANT

Seeding propagation – Vegetative propagation – Cutting – Layering and grafting – Diseases and pest of mulberry plant.

UNIT III- MORPHOLOGY OF SILK WORM

Origin – Distribution – Classification of silk worm – Life cycle and morphology of Egg – Larva, Pupa and Adult.

UNIT IV- ANATOMY OF SILK WORMe

Digestive silk gland – Reproduction – Excretion – Neuron and Endocrine gland – Reproduction

UNIT V- PEST AND DISEASES OF SILK WORM

Pest of silk worm – Uzifly Dermestid beetle- Diseases of silk worm – Viral –Bacterial – Fungal – Protozoan – Causative agents – Mode of infections – Prevention and control of diseases.

Reference:

1. An Introduction to Seri Culture - G.Ganga and Sulochana Chetty, Ox ford and IBH Publishing. Co Pvt.Ltd .New Delhi(2010)
- 2.Principles and Techniques of Silkworm Seed Production, Discovery publishing House New Delhi- Tribhuwar Singh (2004)

PAPER-2: MANAGEMENT AND MARKETING OF SERICULTURE

UNIT I: REARING HOUSE AND APPLIANCES

Environmental condition for silk worm rearing – Rearing technology – Incubation – Brushing – Feeding – Bed cleaning – Mounting – Monntages – Harvesting rearing of Chawki and late age worm

UNIT II: GRAINEGE TECHNOLOGY

The silk worm seed production – Reproduction and commercial seed – Breeding stations – P1, P2, P3 and P4 stations – Moth emotions – Egg laying – Mother moth examination Egg card and loose egg.

UNIT III: SILK TECHNOLOGY

Physical and commercial properties of silk –Uses of silk processing of cocoons- Stifling -Cocoon boiling and Cocoon brushing.

UNIT IV: PROCESSING OF REELING

Process of reeling – Study of yarn –Type of reeling appliances –Raw silk testing –Classification of raw silk – Byproduct of silk.

UNIT V: COCOON MARKETS

Commercial characteristics of cocoon- Assessment of shell Ratio- Renditta-Price fixation- silk market-Co operative marketing in price – Role of extension centre

Reference:

1. Sericulture Manual –Silk worm Rearing-S.Krishnaswami, et.al 2010
2. Hand Book of Sericulture Technologies-Central Silk Board Bangalore- S.B Dandin, et al, 2010