UNIT- I
1. Spinning behaviour of non-mulberry cocoons, Physical and commercial characters of cocoons.
2. Pierced cocoons: storage and disposal
3. Marketing of cocoons: price fixation according to silk content
4. Selection & transportation of cocoon for reeling

UNIT- II
1. Economics of seed organisation: Equipment for preparation of economically viable unit of grainage, cocon DFLS-ratio, manpower requirement.
2. Organising a grainage, cost of preparation of DFLS.
3. Maintenance of records and registers in grainage.
4. Economics of seed production: salaries, wages, establishment, charges, cold storing of eggs, sale of eggs, cost of chemical equipments, egg sheets, furniture, contingencies & miscellaneous expenditure.

UNIT- III
1. Protective measures in seed production
2. SILK REELING: Introduction, evolution, importance & statistics of silk reeling
3. Position of reeling industry in India and other silk producing countries.
4. Raw materials for silk reeling-factor affecting the production of silk yarn, different varieties their characteristics.

UNIT- IV
1. Reeling: object, details study of yarn passage, raw silk yarn size (denier) and importance.
2. Physical, Chemical & Microscopic properties of tasar silk. Uses of tasar silk, different type of silk yarn & their characteristics and uses.
3. Difference between mulberry and non-mulberry silk, Main problem of reeling of tasar silk.
4. Silk testing & quality control: Testing of raw silk, advantage of testing, silk conditioning and testing house, wining test, Seri-plane and serigraph tests, cohesion and standardisation of raw silk.

UNIT- V
1. Reeling machine: Conventional charkha, improved charkha, cottage basin/filature basin, multi end silk reeling basin.
UNIT-I
2. Silk throwing: Introduction. Objective of silk throwing preparation for twisting (Highlight) twist-high twist & low twist.)

UNIT-II
1. Types of water used in processing.
3. Introduction of textile fibre general properties classification of textile fibre. Physical and chemical properties of different fibres (Tasar, well, action deflector.)

UNIT-III
1. Establishment of small reeling units, efficiency, machinery management, production & economics.
2. By products of silk, pupa different types of silk waste.
3. Traditional ghicha preparation of tasar silk blending of tasar silk with other fibre and its problems.
4. Noil and noil yarns

UNIT-IV
2. Dyeing: Introduction of dyeing of tasar silk, cotton and wool with different class of dyestuffs normally used after their treatment.

UNIT-V
1. Printing of tasar silk & cotton by block method, with different group of colour normally used.
3. Finishing: Introduction of finishing, classification of finishing, study of different type of temporary and permanent finishing of tasar silk and cotton.
PRACTICALS

PAPER-I: SEED TECHNOLOGY AND REELING.
PAPER-II: SPINNING, DYEING & PRINTING OF TASAR SILK.

MM: 50

1. Sorting and grading of tasar cocoons.
2. Determination of physical/commercial characters of cocoons.
4. Reeling of tasar cocoons on natwa.
5. Study of reeling and spinning machines.
7. Flaw of grainage buildings & equipment.
10. Study of silk testing: winding test, denier (size) test.
13. Study of silk dying and printing unit: visit to practical centers.
14. Charkha reeling: economic model of silk reeling unit
15. Visit to seed cocoon markets.
16. Visit to multi-voltage & bi-voltage seed forms.
17. Visit to temperate & tropical states of India.
18. Provision to arrange guest/ lectures/film/slide shows.

LIST OF REFERENCE BOOKS:-
5. Technology of Printing: by Shenai.
7. Dye & Dye Intermediates: by S.B.P.