

III SEMESTER
Course 06: TEXTILES AND CLOTHING
Credits -3

Outcomes of the course

The students will be able to

A. Remember and explain in a systematic way:

- The importance of the textiles in human life and also the textile terminology and types of fibres.
- Use of Textile fibres in various fields.

B. Understands and Uses

- Identification of different fibres like plant fibres, animal fibres based on properties.
- Gains knowledge on manufacturing of different textile fibers.
- Understands the method of Spinning and process of yarn construction.

C. Critically explains, judges

- Critical differences between cellulose, protein and man-made fibres.
- Judge the differences between simple and novelty yarns.

D. Working in out of prescribed areas under co-curricular activity

- Collection of different fabrics and gain knowledge about their seasonal usage.

E. Practical Skills

- Identification of different textile fibres using microscopic, burning tests.
- Identification of yarns and their use in textiles.

THEORY

Unit-I Introduction to Textiles

- Introduction to textiles - Importance of study of textiles.
- General properties of a Textile Fiber - Primary and Secondary.
- Classification of textile fibers – Natural and manmade; cellulose, protein, synthetic and mineral

Unit-II Natural Fibers

- Cellulose fibres – Cotton and Linen - Production, properties, use and care
- Minor cellulose fibres
- Protein fibers – Silk and wool - Production, properties, use and care.

Unit-III Synthetic Fibers

- Nylon – Production, properties use and care
- Polyester – Production, properties use and care
- Acrylic fibres – Production, properties use and care

Unit – IV Mineral Fibers

- Mineral fibres – Fibre glass and Asbestos Production, properties and Uses
- Mixtures and Blends – Importance and advantages of Blending
- Blends of Natural cellulose fibers, protein fibers and manmade fibers.

Unit – V Yarns

- Yarns – Types of Yarns - Staple and Filament
- Methods of spinning – Mechanical process
- Methods of spinning – Chemical process - Wet , Dry
- Classification of yarns – simple, novelty and textured yarns

PRACTICAL

Credits -1

1. Identification and collection of Textile Fibres
 - Plant Fibres – Cotton, Linen, Jute
 - Animal Fibres – Silk, Wool
 - Synthetic Fibres – Polyester, Nylon, Acrylic
2. Identification and collection of Yarns
 - Simple Yarns
 - Novelty Yarns
3. Tests to identify textile fibers
 - Texture
 - Microscopic examination and
 - Burning test.

REFERENCES

1. DeepaliRastogi and Sheetal Chopra (2017). Textile Science, 1st edition, Orient Black Swan Pvt. Ltd.
2. KanwarVarinder Pal Singh. (2014). Introduction to Textiles, 1st edition, Kalyani Publishers.
3. Seema Sekhri. (2017). Text book of Fabric – Fundamentals to Finishing, 2nd edition, PHI Learning Pvt. Ltd.
4. Sushma Gupta, NeeruGarg, Renu Saini. (2018). Text book of clothing, textiles and laundry, 8th edition, Kalyani publishers.

5. Vastala, R. (2013) .Text book of Textiles and Clothing, 1st edition, Published by ICAR.

CO- CURRICULAR ACTIVITIES

1. Seminar/Assignment/Quiz/Group Discussion
2. Use of ICT in Class reports and Seminars.
3. Project Work
4. Construction of garments and their exhibition.
5. Visit to nearby weaving, dyeing units and printing Centres.