ST.JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

II SEMESTER **HOMESCIENCE** TIME: 4HRS/WEEK

HS 2302 (3) **FUNDAMENTALS OF TEXTILES**  MAX.MARKS:100

w.e.f. 2020 – 2021 (“20AH”) **SYLLABUS**

**OBJECTIVES:**

**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.

**UNIT- I: INTRODUCTION TO TEXTILES AND CLOTHING**

• Introduction to textiles and clothing - 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; staple and filament fibres

**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**

• Rayon- Production, properties, use and care

• 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.

•Yarns- Types of Yarns, Classification of Yarns

Methods of Spinning-Mechanical and Chemical Process (Wet, Dry, Gel and Melt)

**UNIT – V: LAUNDRY REAGENTS**

• Water-Soft and Hard water

• Soaps and Detergents

• Starches and Blues

• Bleaches

**REFERENCE BOOKS:**

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ST.JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

II SEMESTER **HOMESCIENCE** TIME: 2HRS/WEEK

HS 2352(2) **FUNDAMENTALS OF TEXTILES**  MAX.MARKS:50

w.e.f. 2020 – 2021 (“20AH”) **PRACTICAL** **SYLLABUS**

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.

4. Laundry

• Laundry Equipment

• Laundry of Cotton, Wool, Silk and synthetics

• Soaps and Detergents

• Starches and Blues

**REFERENCES:**

1. Deepali Rastogi and Sheetal Chopra (2017). Textile Science, 1st edition, Orient Black Swan Pvt. Ltd.

2. Kanwar Varinder 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.

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.

**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.

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