



## 3055 BA SANGAM COLLEGE

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### LESSON NOTES

School: Ba Sangam College

Name : \_\_\_\_\_

Subject: Home Economics

Year:11

Strand	HEC 11.3: CLOTHING AND TEXTILES
Sub strand	HEC 11.3.1 Fibres And Fabrics.
Content Learning Outcome	Explore the characteristics of special fibers ,woven and knitted fabrics

#### Basic Principles in the Production of Fibres

1. **Carding** - a process of separating individual fibres and causing many fibres to lie parallel and also removing most of the remaining impurities.

-produces a thin sheet of uniform thickness that is then condensed to form a thick, continuous, untwisted strand called sliver.

2. **Hackling** - is the disentangling of fibres and combing them out, laying the fibres smooth and parallel, and splitting these into ultimate filaments.

- The fibres are then combed on hackles to produce long line fibres that can be spun, called line flax.
- The short fibres that are combed out are the hackle tow or flax tow and are carded and spun into coarse yarns and thread.

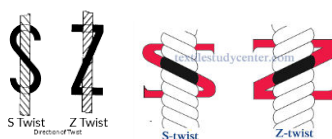
3. **Combing** - is a technique whereby fibres (usually cotton or wool) are passed through a series of straight, metal teeth in order to lay the fibres parallel to one another

- In this process, long fibres are separated from shorter ones (noils) and tangles are removed.
- Combed fibres are generally used for producing worsted threads.

#### PRINCIPLES INVOLVED IN THE PRODUCTION OF SPUN, FILAMENT YARN, YARN TWIST—S AND Z.

#### TWISTING

- Twisting in yarn and rope production, process that binds fibers or yarns together in a continuous strand, accomplished in spinning or playing operations.
- The direction of the twist may be to the **right** as **Z twist**, or to *the left* as **S twist**.



## **Types of yarn**

Classification based on number of strands – Single, Textured and Novelty.

### **1. Single Yarn**

- are single strands composed of fibres held together by at least a small amount of twist.
- are used to make the greatest variety of fabrics.

### **2. Textured Yarn**

- applied to man-made fibres to reduce transparency, slipperiness and pilling
- Texturizing processes make yarns more opaque, improve appearance and texture, and increase warmth and absorbency.

### **3. Novelty**

- include a wide variety of yarns made with such special effects as slubs, produced by intentionally including small lumps in the yarn structure.

## **WORKSHEET 7**

**1. Explain the basic principles in the production of fibers. (3 marks)**

- a. \_\_\_\_\_  
\_\_\_\_\_
- b. \_\_\_\_\_  
\_\_\_\_\_
- c. \_\_\_\_\_  
\_\_\_\_\_

**2. Describe how the types of yarns are classified. (2 marks)**

\_\_\_\_\_  
\_\_\_\_\_

**3. Differentiate the Z and S twist in yarn production. (2 marks)**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**4. Describe the following types of yarns: (3 marks)**

a. Textured Yarns-

\_\_\_\_\_  
\_\_\_\_\_

b. Single Yarn-

\_\_\_\_\_  
\_\_\_\_\_

c. Novelty Yarn-

\_\_\_\_\_  
\_\_\_\_\_