

## FIBRE TO FABRICS

### Fibres and Fabrics

- Fibres are very thin, thread-like strands from which fabrics or cloth is made.
- Examples of fibres are cotton, wool, Silk, flax, Jute, nylon, polyester, polyacrylic.
- The fibres are spun into yarn which can then be woven on a Loom to make a fabric or cloth.



- Fabrics are defined as a cloth material made by knitting or weaving of yarn threads together.

### Types of Fibre

- There are two types of fibres and are classified according to their origin.
- **Natural fibres**: These fibres are naturally obtained from plants and animals.
- Cotton and jute are fibre obtained from plants. Silk and wool are fibre obtained from animals.
- **Synthetic fibre**: These fibres are artificially synthesized by humans within the industry by the application of simple chemicals.
- Acrylic, polyester, nylon, rayon, acetate, are few examples of Synthetic fibres.

## **Animal Fibres: The two animal fibres are:-**

### **Wool**

- Wool fibres come from sheep, camel, goat, and yak.
- The process involved in making animal fibres into wool follows a series of steps – Shearing, Scouring, Sorting, Cleaning, Dyeing, Straightening, Rolling and Combing.

### **Silk**

- Silk fibres are obtained from the silkworm and the process of obtaining silk from the silkworm is called sericulture.

## **Plant Fibres: The two plant fibres are:**

### **Cotton**

- Cotton is obtained from cotton bolls which are taken directly from the surface of cotton seeds.
- It is grown in black clayey soil with a warm climate.
- The processing of cotton involves Ginning, Spinning, Weaving and Knitting.

### **Ginning**

- The plant from which cotton is picked contains seeds.
- Ginning can be done using hands or by machines.

### **Spinning**

- The process of making yarn from thin strands of fibres is called spinning.
- It can be done by hand or on a spinning wheel.

### **Weaving**

- Two distinct yarns are arranged together on weaving machines, known as looms, to make a fabric.

### **Knitting**

- Knitting is one of the most popular methods to make fabrics from yarns.
- In this process, a single yarn is used to make a piece of fabric.

### **Jute**

- Jute fibre is obtained from the stem of jute plants. It is soft, shiny and long fibre with a silky texture.

## Evolution of clothing

- In ancient times people used the bark and big leaves of trees or animal skins and furs to cover themselves.
- After people began to settle in agricultural communities, they learnt to weave twigs and grass into mats and baskets.
- The early Indians wore fabrics made out of cotton that grew in the regions near the river Ganga. Flax is also a plant that gives natural fibres.
- In those days, stitching was not known. People simply draped the fabrics around different parts of their body.
- With the invention of the sewing needle, people started stitching fabrics to make clothes.
- In modern days, clothing became mechanized, where machines have more to do with making clothes

## Exercise

### 1) State whether the following statements are true or false:

- a) Fibre is made from yarn.
- b) Wool is obtained from plants.
- c) The process of removing seed from cotton is called ginning.
- d) Weaving of yarn makes a piece of fabric.
- e) Silk fibre is obtained from the silkworm
- f) Jute is a natural fibre.
- g) Nylon is a synthetic fibre
- h) The fibres are spun into yarn which can then be woven on a Loom to make a fabric or cloth.

### 2) Fill in the blanks

- a) Fabrics are made from-----, which in turn are made from fibres.
- b) Fibres are either----- or -----.
- c) Cotton, wool, silk and jute are some -----fibres,

- d) Fibres like cotton and jute are obtained from-----.
- e) The process of making yarn from fibres is called-----.
- f) Fabric from ----- is made by weaving and knitting.
- g) -----Is obtained from cotton bolls -.
- h) Cotton is grown in -----soil with a warm climate.
- i) The processing of cotton involves Ginning, Spinning, ----- and Knitting.
- j) Jute fibre is obtained from the ----- of jute plants.
- k) The process of making yarn from thin strands of fibres is called -----.

### 3) Short answer type questions

- a. What is fibre?
- b. What is a fabric? Name two synthetic fibres?
- c. Name two animal fibres?
- d. What is knitting process?
- e. What are the two sources of wool fibre?
- f. What is sericulture?
- g. Where is jute found?
- h. How people do clothing in ancient times?
- i. From which parts of the plant cotton and jute are obtained

### 4) Long Answer Type Questions

- A. What are the synthetic and natural type of fibres?
- B. What are plant and animal fibres?
- C. Explain the steps involved in the processing of cotton?
- D. Write short note on evolution of clothing?