Revision Notes

CHAPTER - 3

Fibre to Fabric

FIBRE: Fibre is a fine thread-like filament.

FABRIC: woven cloth.

Fibres: There are two types of fibres:

(a) Natural Fibres: The fibres which are obtained from plants and animals. Example: cotton, jute, silk and wool.

(b) Synthetic Fibres: are made from chemicals substance.synthetic fibres are manmade fibre. They are also called artificial fobres.. Examples: rayon, nylon, polyester, etc.

Fibres from plant sources:

- 1. **Cotton**: cotton comes from cotton lant. Both , plant and the fibre are called cotton.cotton is grown in black soil and warm climate.
- 2. **Jute**: jute is obtained from stem of jute plant.
- 3. **Hemp**; The drug plant.
- 4. **Flax**:- comes from linsee plant used for weaving linen.
- 5. **Rhea or ramie**:- is used for making sails for boat and also parachutes.
- 6. **Coir**; is the fibre which comes from coconut palm.

PROCESSING OF COTTON FIBRE

- 1. **Ginning**:- Removal of seeds from fibre.
- 2. **Carding :-** cleaning and separating of fibres stuck together.
- 3. **Drawing:** stretching of fibre (fluffying).
- 4. **Spinning :-** drawing yarn thread from cotton fibre.
- 5. **Weaving:** making cloth or fabric from yarn.

PROCESSING OF JUTE

- 1. **Retting of plant :-** After harvesting the jute plants (stalks) are retted (soaked) in water for 10 to 15 days or more. retting soften the rest of the stem tissues other than fibres.
- 2. **Stripping :-** The stalks are stripped to bring out the fibres. This is done by hand.
- 3. washing an drying: The stripped fibres are washed and dried in sun.

Fibres from animal sources:

- (a) Wool: wool cloth is spun from yarn made from the fibres of the thick fleece of sheep.
- (b) Silk: silk thread is obtained from the saliva of an insect called silkworm.

Processing of wool: It involves four steps:

- 1. **Shearing**: The process of removal of wool from the sheep's skin.
- 2. **Grading**: The process of separating fleece from damaged wool.
- 3. **Carding**: The process after the wool has been washed and dried, it is passed through the rollers (that have teeth).
- 4. **Spinning**: The process by which fibrs are gathered together and drawn into a long rope and then twisted to make yarn.

Fabrics are made from yarns, which in turn are made from fibres.

Spinning :- The fibres are twisted to make yarn . The process of making yarn from raw fibrous materials is called spinning.

Making Fabric from Yarn: It is done by two processes:

(a) Weaving: The process by two sets of yarns are arranged together to form fabric. It is done on looms.

weaving involves placing two sets of threads or yarn made of fibre, calle the **warp** and **weft** of the loom.

The **warps** are drawn tight in parallel order, with the **weft** being interplaced at rught angles to the warps.

(b) Knitting: The process by which a single yarn is used to make fabric. It is done by hand or machines.