

B.A. II SEMESTER (NEP 2020)

Introduction to Clothing and Textiles (Major Core)

Unit II

Types of Fibres: Variety of Clothing Fibres

Based on the chemical origin, Clothing fibres are classified into two types: Natural fibres and Synthetic fibres.

Natural Fibres



NATURAL TEXTILE FIBRES



COTTON



LINEN



BAMBOO



HEMP



WOOL



SILK

The following are the properties of natural fibers:

Plant/ vegetable fiber

Cotton: cotton is a vegetable fiber. It is made from cotton balls of cotton plant. The cotton fiber surrounds the seed of cotton plant. Cotton plants are grown in Northern part of Nigeria and other countries like China, Egypt, America, India, Asia etc.

Properties of cotton

The following are the properties of cotton

1. It absorbs moisture quickly.
2. It is easy to wash.
3. It is strong and durable.
4. It is prone to wrinkling, but easy to wash.
5. It is a mothproof.
6. It can be affected by mildew in a damp condition.
7. It absorbs dye easily and white cotton easily bleaches.
8. It cool and comfortable to wear.



Uses of cotton

1. It is used in production of dresses, underwear, night wears, sewing threads etc.
2. It is used in production or construction of home article like towels, bed sheets etc.
3. It is used for making cotton bud used for cleaning the ear.
4. It is used for making baby wears.

Types of cotton fabric.

Catico, chiffon, brocade, velveteen, sateen, flanellette.

Linen: is a vegetable fiber. It is gotten from the stem of flax plant. The flax plant grows in countries like France, Russia, and Belgium etc.

Properties of linen

1. It is the strongest natural fiber; it increases in strength when wet.
2. It is highly absorbent and cool to wear.
3. It has poor elasticity, therefore wrinkles easily.
4. It is relatively smooth and becomes softer when washed.
5. It dries slowly.
6. It is durable and strong.
7. It can stand high temperature.
8. It damages in mildew.
9. It washes well but Flays easily and badly.



Uses of linen

1. It is used in the production of household linens like tea towels, glass clothes, tray cover etc.
2. It is used for industrial production like luggage, canvas etc.
3. It is used in the home and commercial furnishing like wallpaper, window treatments, bed sheets etc.
4. It is used in making dresses like suit, skirt, shirt etc.

Types of linen fabrics

Canvas, twill, damask, lawn, cambric etc.

Animal fibers

Wool: this is an animal fiber.

It is gotten from hairs or fleece of sheep, camel, Angora rabbit and Angora goat. Wool is commonly produced in temperate countries like Britain, Australia New Zealand, and Argentina etc.

Properties of wool

1. A wool has a scaly appearance
2. Wool is elastic and springy to touch.
3. It makes a very absorbent fabric.
4. It is stronger when dry than wet.
5. It gives the smell of burning feather when burnt.
6. It is attack by moth and other insects.



Uses of wool

1. It is used in production of articles like jackets, suit, trousers, sweater, hat, socks and baby wears.
2. Articles like blanket, carpet are made of wool.
3. It is also used in making of horse rug saddle.

Types of wool fabrics:

Flannel, blanket etc.

Silk: is an animal fiber. It is produce from silkworm. It is produced in countries like France, Italy, China and Japan

Properties of silk

1. It is smooth and fine. It is beautiful and has natural lusture.
2. It is a strong fiber.
3. It is warm to touch.
4. It is weak when wet.
5. It is easily dyed.
6. It gives the smell of a burning feather when burnt.



Uses of silk

Silk is used in the production of the following:

Umbrellas, pajamas, robes, sewing threads, scarves etc.

Man made or synthetic fibers.

The cellulose based fibers:

Rayon: This is made by treating wood pulp or cotton linters with certain chemicals. Therefore they're called the regenerated cellulose fibers.

Properties of rayon

1. It is cool to wear.
2. It is absorbent.
3. It is soft and drapes well.
4. It has smooth surface.
5. It dyes well.
6. It is not easily attacked by mildew.
7. It very strong when wet.



Uses of rayon

Rayon is used for making the following:

1. Feminine hygiene products, diapers, panty liners, tyre cord etc.
2. Jacket, necktie, blanket, bed sheets etc.

Non cellulose based fibers

Nylon: this is a non cellulose fiber; it is produce from mineral substances like coal and petroleum. However Nylon is a compound name given to all synthetic polyamides.

Properties of Nylon

1. It is light in weight.
2. It is very strong.
3. It easy to wash.
4. It requires no ironing.
5. It is durable.
6. It does not absorb much water.
7. It does not shrink.
8. It has smooth surface.
9. It is very elastic.
10. It is not comfortable to wear in hot weather.



Uses of nylon

The following are uses of nylon:

Nylon is used in the production of pantyhose, leggings, carpet, curtains, airbag, ribbon, lace etc.

Polyester: are products of complex series of chemicals processes using petroleum products and other chemicals. It is a non cellulose fiber.

Types of polyester fabrics are tergal, terylene, Dacon, Dede etc.

Properties of polyester

1. They are very strong.
2. They are easy to wash.
3. They do not absorb much water therefore dry up easily.
4. They're resistant to moth and Roth.
5. They do not Shrink or stretch much.
6. They are not easy to dye.



Uses of polyester

Polyester is used in the production of the following:

Safety belt, cushion materials, hats, jacket, pants, tyre reinforcement etc.