



# **TRINITY COLLEGE FOR WOMEN NAMAKKAL**

**DEPARTMENT OF COSTUME DESIGN & FASHION**

**FIBER TO YARN  
EVEN SEMESTER**

**Presented by**

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# Classification of Textile Fibers

# INTRODUCTION

The history of fibres is as old as human civilization. Traces of natural fibres have been located to ancient civilizations all over the globe. For many thousand years, the usage of fiber was limited by natural fibres such as flax, cotton, silk, wool and plant fibres for different applications.

Fibers can be divided into natural fibres and man-made or chemical fibres. Flax is considered to be the oldest and the most used natural fibre since ancient times



## "fiber" or "textile fiber"

- A unit of matter which is capable of being spun into a yarn or made into a fabric by bonding or by interlacing in a variety of methods including weaving, knitting, braiding, felting, twisting, or webbing, and which is the basic structural element of textile products.
- It is a smallest textile component which is microscopic hair like substance that may be man made or natural.
- They have length at least hundred times to that of their diameter or width

For the standardisation, classification and easier identification of fibres, **Federal Trade Commission (FTC)** assigned generic groups of manufactured fibres according to their chemical composition like Poly ester, Poly Amide. Acetate etc.

# Classification of Fibres

- Natural Fibers
  - Vegetable Fibres
  - Animal Fibres
  - Mineral fibers
- Man Made fibers
  - Regenerated fibres
  - Synthetic fibres
- Inorganic fibres

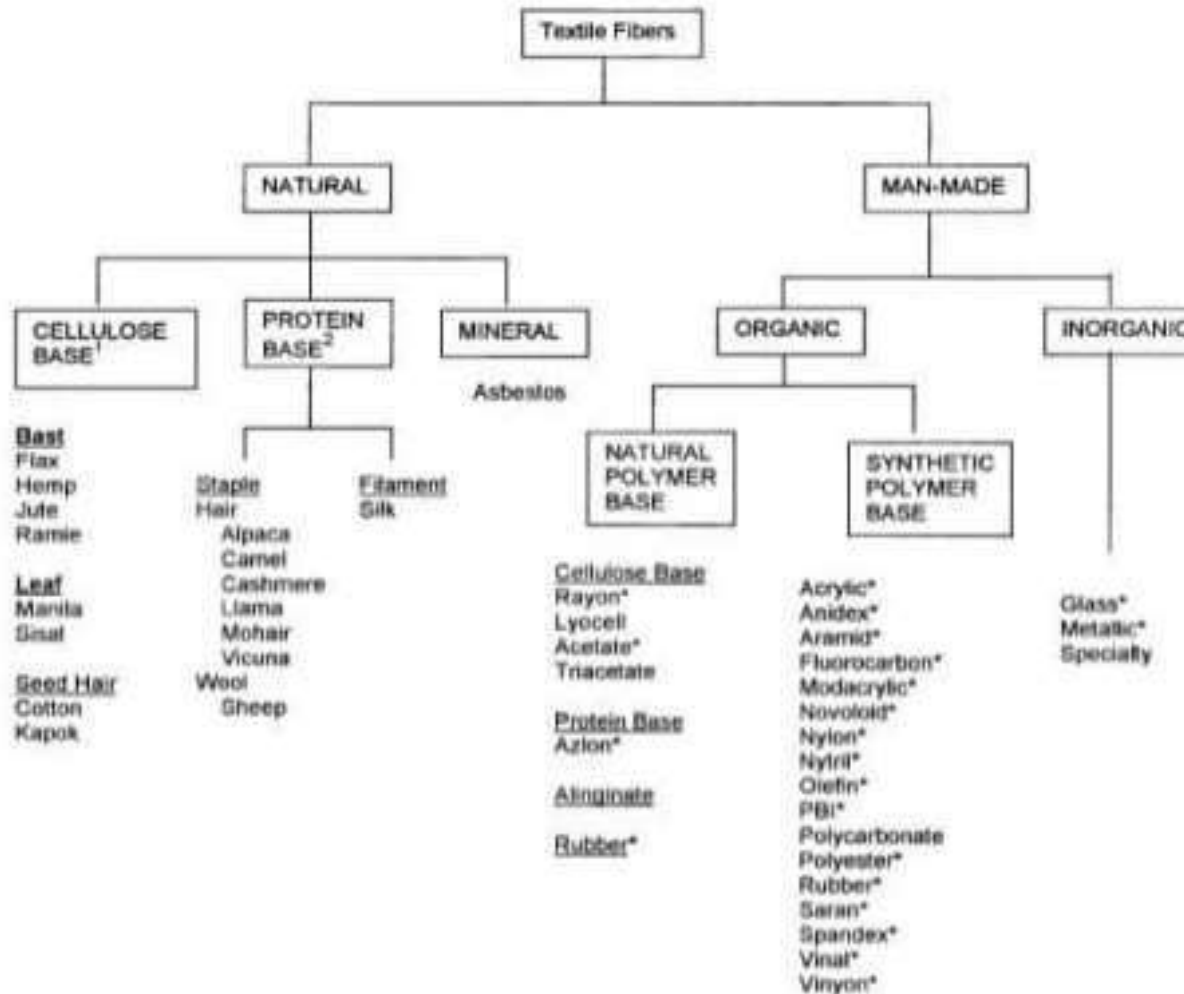
Classification of fibers can be done by:

**Type** (Natural and manufactured)

**Length** (Short staple, long staple, continuous filament)

**Size** (Ultra fine, fine, regular, course)

# General Classification of Textile Fibers



## NATURAL FIBRE

- Any hair like raw material directly obtainable from an animal, vegetable or mineral source that can be convertible after spinning into yarns and then into fabric.
- Under them there are various categories:
  - (1) plant
  - (2) animal
  - (3) minerals



# ANIMAL FIBRES

- Animal fibers are natural fibers that consist largely of proteins such as silk, hair/fur, wool and feathers.
- The most commonly used type of animal fiber is hair.

They can be classified further as

Hair Fibres (Staple)      Secretion Fibres      (Filament)

Wool   Silk

Speciality hair fibres      Spider Silk

(Insect fibre)

# THANK YOU

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