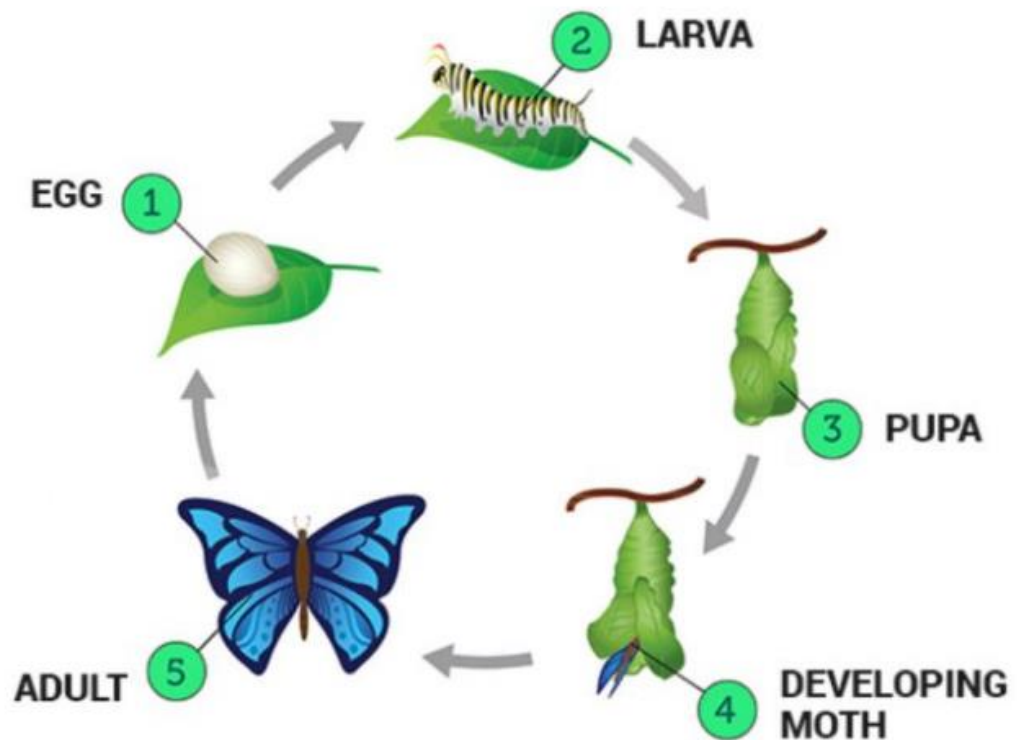


1. Where do we get silk from?

Ans. The best-known silk is obtained from the cocoons of the larvae of the mulberry silkworm *Bombyx mori* reared in captivity (sericulture).

### Life History of Silk Moth



2. Name two types of natural fibres.

Ans. There are two types of fibres – One is natural fibres which are obtained from natural sources e.g. Cotton, silk, wool and other is synthetic fibres which are man-made for example – rayon, nylon, acrylic etc.

3. What is a fibre ?

Ans. Fibres are thin strands of thread, that are woven to make fabric, for example, cotton fabric, silk fabric, etc. The fabric is

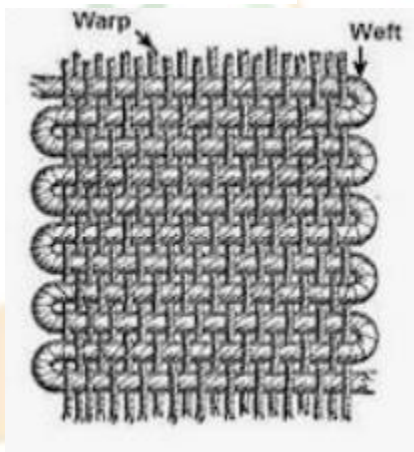
stitched to make clothes. There are two main processes of making fabric from fibre – weaving and knitting.

4. Name any three things that can be made from jute fibre.

Ans. Jute is extensively used for making gunny bags, potato sacks, carpets, curtains, coarse clothes and ropes, etc

5. What is weaving ?

Ans. Weaving is the process of combining warp and weft components to make a woven structure. In weaving, lengthwise yarns are called warp; crosswise yarns are called weft, or filling. In simple words we can say that, The process of arranging 2 or more yarns together to make a fabric is called Weaving. Weaving is done on looms. Weaving is either hand operated (handloom) or power operated.



6. What type of soil is needed for the cultivation of cotton ?

Ans. Black soils are most suitable for the cotton crop hence it is also known as black cotton soil.

7. What is cocoon ?

Ans. The silky covering spun by the silkworm (or caterpillar) of silk moth is called cocoon. The cocoon is made by silkworm to protect its development as pupa. Pupa is a stage in the life history of silk moth when the caterpillar (or silkworm) becomes 'encased' in a hard shell of silk fibres called cocoon.

**8. Write any three characteristics of the cotton plant.**

Ans. Tensile Strength: It is moderately strong fibre and good tensile strength which is greatly affected by moisture, the wet strength is higher than dry strength.

Color: Its colour is from white, creamy white, bluish white to yellowish white or grey.

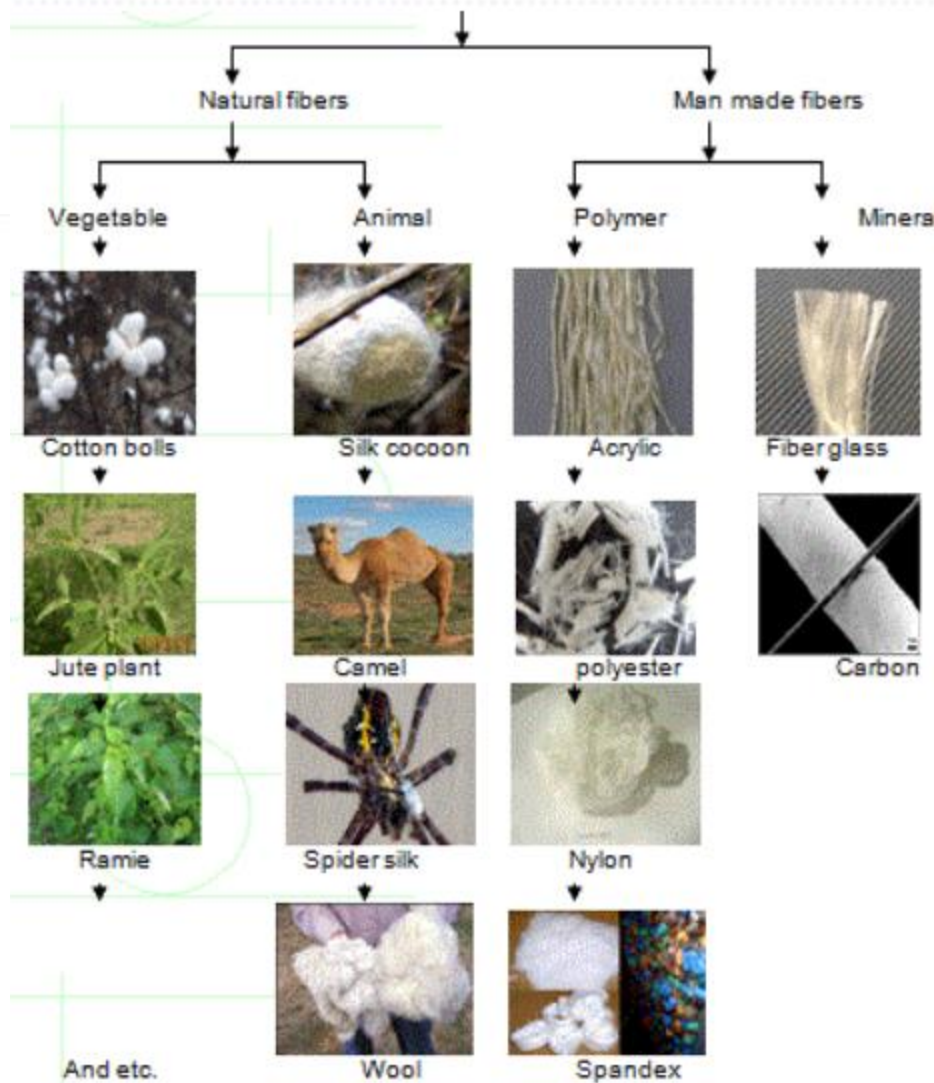
**9. How are fibres classified ? Give one example of each type.**

Ans. Fibres can be classified as natural fibres and synthetic fibres.

Natural fibres are obtained from plants and animals. The examples of such fibres include cotton, jute, silk and wool.

Synthetic fibres are made from chemical substances, which are not obtained from plant or animal sources. Examples include polyester, nylon and acrylic.

SCIENTIA IPSA POTENTIA EST



10. What advantages does cotton have over synthetic cloth ?

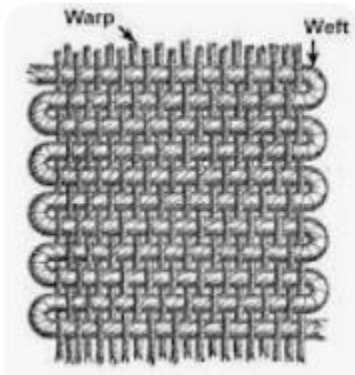
Ans. i) Cotton is a breathable fabric material which gives more comfort than the synthetic fibres.

ii) Washing and removing any stain from cotton fabric is lot more easier than the synthetic fibres.

iii) High quality cotton fabric is lot more durable than the synthetic fibres.

11. What are warp and weft yarns ?

Ans. Warp and weft are the technical names of the yarns in a fabric. Woven fabrics are made of two sets of yarns - warp yarns and weft yarns. The yarn lies parallel to the fabric edge (selvage) is called the warp and the yarn lies perpendicular to the fabric edges is called weft yarns



12. Give detailed account of “discovery or origin of clothing.”

Ans. Early humans, who lived two million years ago used to cover and protect their bodies by wrapping tree leaves, woven grass or tree barks, bones, skull and the skin of dead animals, etc.

According to the Anthropologists, there is no information about when we humans started using clothes. However, some records say that humans started wearing clothes about one million years ago.

The first material used for clothing is the natural fibres obtained from both plants and animal sources. These include cotton, flax, wool, leather, silk, etc. The first plant fibres used for extracting fibres are from flax seeds. China was the first country to start with silk production, where silk was extracted from the cocoon of the domesticated silkworm and weaved.

The first clothes were made from natural elements: animal skin, fur, grass, leaves, bone, and shells. Garments were often draped

or tied; however, simple needles made out of animal bone provide evidence of sewn leather and fur garments from at least 30,000 years ago.

Humans had to invent weaving, spinning, tools, and the other techniques needed to be able to make the fabrics used for clothing.

Clothing serves many purposes: it can help protect us from various types of weather, and can improve safety during hazardous activities such as hiking and cooking. It protects the wearer from rough surfaces, rash-causing plants, insect bites, splinters, thorns and prickles by providing a barrier between the skin and the environment. Clothes can insulate against cold or heat. They can also provide a hygienic barrier, keeping infectious and toxic materials away from the body. Clothing also provides protection from harmful UV radiation.

13. What is a loom ? For what purpose is it used ? What is the difference between handloom and powerloom ?

Ans. A loom is a device for weaving yarn or threads into fabric. It is used for making fabrics.

Handlooms are manually operated looms used for weaving in which picking and beating is done manually by human hands, whereas powerlooms are mechanized looms driven by steam engines or electric power in which shedding, picking and beating are done automatically rather than manually.

The differences between the handloom and power loom are given below:

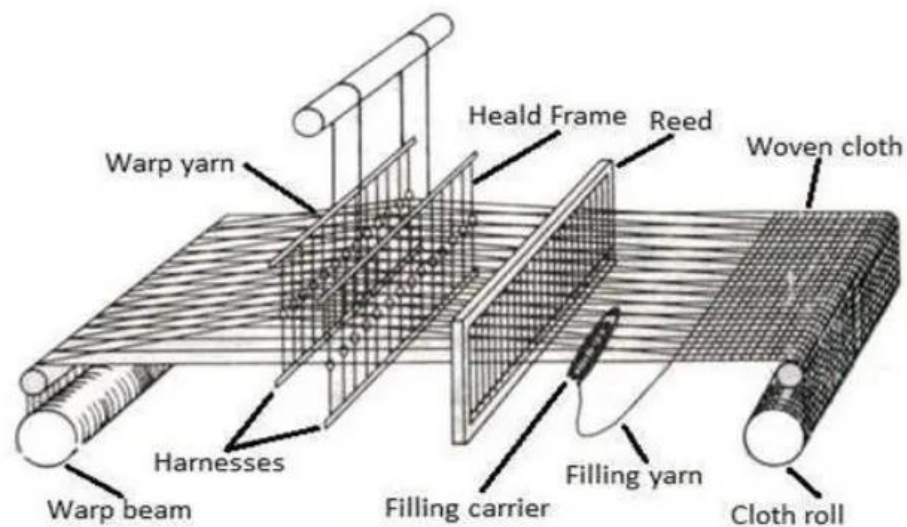
Handloom:

1. Manually Operating System

2. Running speed is slow
3. Production is less
4. Initial investment is very low
5. Fewer number of designs can be produced.

Powerloom:

1. Powerloom is operated by electric power
2. Running speed is high
3. Production is high
4. Initial investment is very high
5. More designs can be produced.



*Fig: Basic structure of a loom*



*Fig: Handloom*







*Fig: Power Loom*

14. How is weaving different from knitting ?

Ans. In weaving, two sets of yarns are used simultaneously to make a fabric, whereas in knitting, a single yarn is used to make a fabric.

Knitting and weaving are two popular ways of creating fabric or cloth. Knitting is created with loops, or stitches. Weaving is the process of taking two sets of yarn and weave them to make into fabric. The difference between Knitting and weaving is that knitting means to entangle the threads in such a way that they run parallel to each other whereas in weaving the threads are warped to form a criss-cross pattern.