

Class7 Chapter 03. Plants fiber and fabric

A Tick the correct options:

1. Which of the following is not a natural fibre?
(a) cotton (b) rayon ✓ (c) silk (d) wool
2. Lohi is the breed of
(a) cow (b) silk moth (c) sheep ✓ (d) buffalo
4. Sheep are sheared in season
(a) summer (b) spring ✓✓ (c) autumn ✓ (d) winter
3. How many weeks are required for the eggs of silk moth to hatch? See book
(a) one (b) two ✓ (c) three (d) four
6. Which of the following silk is produced when raw silk is twisted?
(a) spun (b) coloured (c) thrown ✓ (d) mooga
5. What do we call the silky covering spun by the silkworm for its protection?
(a) moth (b) larvae (c) pupa (d) cocoon ✓

B. Fill in the blanks:

1. Alpaca is generally found in South America.
2. Silk and wool fibres are obtained from animals.
3. Silk is obtained from cocoons of silkworm.
4. Natural fibres are obtained from plants and animals.
6. The fewer the burrs, the better is the wool.
7. The eggs are warmed to a suitable temperature in an oven
8. During the period of spinning of its cocoon, a silkworm is transformed into Pupa.

C. State whether the following statements are True (T) or False (F). Rewrite the false statements correctly:

1. Silk is obtained from cocoons of silkworms. (T)
2. The process of washing the fleece of sheep to remove dust, dirt, sweat and grease is called shearing.
False Scouring.
3. The rearing of silkworms for obtaining silk is called sericulture. T
4. The damaged or waste cocoons are used to produce raw silk. F Spun silk

D. Very Short Answer Questions:

1. What is the process of removing the burrs from fleece called? Ans. Combing
2. Name any two breeds of sheep found in India. Ans. Merino ,Lohi
3. Name the process of removing hair from the body of a sheep. Ans. Shearing
4. Name the sheep which is found in Gujarat and whose wool is used in hosiery. Ans. Patanwadi
6. Which country leads the world in silk production? Ans. China
5. What is the process of taking out threads from the cocoon called? Ans. reeling the silk
7. Name two wool-yielding animals. Ans. Sheep, goat, yak and camel.

E. Short Answer Type-I Questions:

1. What is meant by rearing of sheep?

Ans. The raising and breeding of domestic sheep is called rearing of sheep.

Sheep are raised principally for their meat (lamb and mutton), milk (sheep's milk), and fiber (wool)

2. What is throwing?

Ans. Throwing is the process of twisting and doubling the single raw silk fibres into usable thread after reeling and cleaning.

3. Why does shearing not hurt the sheep?

Ans. Shearing doesn't usually hurt a sheep. It's just like getting a haircut.

4. What is meant by scouring?

Ans. The sheared skin with hair is thoroughly washed in tanks to remove grease, dust and dirt. This is called scouring.

5. What is cocoon?

Ans. A cocoon is a soft covering that an insect spin with silky thread to protect itself.

F. Short Answer Type-II Questions:

1. What is meant by selective breeding? What is its purpose?

Ans. Selective breeding is a kind of artificial selection in which two different kind of breed are crossed to develop new organisms with desirable characteristics. For example native breeds (female) crossed with exotic breed (male).

2. What is silk? How do we get silk from cocoon?

Ans. Silk is a kind of animal which are soft and lustrous.

The cocoons are kept under the sun or boiled or exposed to steam. The silk fibres separate out.

3. (a) What are raw silk and spun silk? (b) On burning silk, it gives out the smell of burning hair. Give reason.

Ans. (a) Silk fibre obtain from cocoon and twisted to make stronger thread is called raw silk. Silk fibre obtain from damaged cocoon is called spun silk.

(b) On burning silk gives out the smell of burning hair as it is made up of protein

4. With the help of a flow chart only, describe the life cycle of a silkworm.

5. (a) What is sorter's disease?

Ans. People working in wool industry sometimes they get infected by a bacterium called anthrax, which causes a fatal blood disease called sorter's disease

(b) Name two Indian breeds of sheep and also mention the quality of wool produced.

Ans. (i) Deccani sheep breed - low grade fibres, mostly used for the manufacturing rough blankets (Kambals).

(ii) Gaddi Sheep Breed - wool is fine and lustrous and it is used for manufacturing of high quality kulu shawls and blankets.

6. (a) Why do wool yielding animals have a thick coat of hair on their bodies?

Ans. wool yielding animals have a thick coat of hair on their bodies so that sheep can withstand with cold weather.

(b) The process of removing hair from the body of sheep is called shearing. Why is shearing done in summers?

Ans. Sheep are usually found in hilly and cold region. Shearing of sheep done in summers because sheep can survive without their protective coat of hair.

G. Long Answer Questions:

1. Write the various steps involved in the production of silk cloth from silk moth.

Ans. a. Incubation: The silk moth eggs are warmed to a temperature suitable for hatching. This is known as incubation.

b. Rearing: After hatching, the silkworms are fed on mulberry leaves for six weeks, and the worms eat almost continuously and increase in size.

c. Spinning: Branches of trees or shrubs are placed in their rearing houses. The worms climb these branches and make their cocoons out of one continuous thread.

d. Reeling: The cocoons are first boiled or treated in ovens, killing the insects by heat. The silk fibre is then obtained from the cocoons by a delicate process known as reeling. This fibre woven into cloth.

2. Describe the process of wool production.

Ans. The different processes involved in wool production are shearing, scouring, grading, dyeing, and drying.

Shearing: The process of removal of the fleece from an animal is called shearing.

Scouring: The sheared hair is washed properly to remove dirt, dust, and grease. The process of removing dirt, dust, and grease from the sheared hair is called scouring.

Grading : the wool is sorted on the basis of length, colour, texture

Dyeing: As the natural colour of fleece is white, brown, or black, the sheared wool is dyed in different colours.

Drying : In this process, containers of wool are put through rollers to squeeze out as much water as possible. Then the wool is weighed and packed into bales. The bales are transported to the mills where they are processed further for making cloth

3. Discuss various varieties of natural silk.

Ans. Eri silk – it may be white or brick-red ;

Muga silk - golden-yellow silk thread which is very attractive and strong.

Mulberry silk – it contributes to around 90 percent of the world silk production.

Tasar silk - copperish colour mainly used for furnishings and interiors.

H. HOTS (Higher Order Thinking Skills) Questions:

1. How is selective breeding advantageous for us?

Ans. selective breeding increase the production by selecting best variety of animals.

2. Why are animal activists against the silk production?

Ans. Animal activists are against the present process of getting silk from the cocoon because in this process the pupa are killed in a cruel way by boiling them in water.