

Fibre to Fabric

1. Consider the following statements (i-iv) and select the option that correctly identifies true (T) and false (F) ones.
- (i) Silk is a cellulosic fiber.
 - (ii) The hair on a sheep's body is called fleece,
 - (iii) Silk fabric was first developed in ancient China.
 - (iv) Cashmere is an extremely soft wool obtained from Cashmere sheep.

	(i)	(ii)	(iii)	(iv)
(a)	F	F	T	T
(b)	T	T	F	T
(c)	F	T	T	F
(d)	T	T	T	F

2. Match column I with column II and select the correct option from the codes given below.

Column - I	Column - II
(A) Clothing material	(i) Nylon
(B) Twisted fibre	(ii) Fabric
(C) Synthetic fibre	(iii) Yarn
(D) Animal fibre	(iv) Jute
(E) Plant fibre	(v) Wool

- (a) (A) - (i), (B) - (ii), (C) - (iii), (D) - (iv), (E) - (v)
- (b) (A) - (ii), (B) - (iii), (C) - (v), (D) - (i), (E) - (iv)
- (c) (A) - (ii), (B) - (iii), (C) - (i), (D) - (v), (E) - (iv)
- (d) (A) - (i), (B) - (iv), (C) - (iii), (D) - (ii), (E) - (v)

3. The given figure shows a tool which is used to convert wool fleece into narrow untwisted fibres called slivers. This tool is used in the process of ____ of wool.



- (a) Shearing
- (b) Scouring
- (c) Carding
- (d) Sorting

4. Which of the following statements is incorrect?
- (a) Fibroin is the gummy substance that holds the two strands of sericin of a silk fibre together.
 - (b) Asbestos is the only naturally occurring long mineral fibre.
 - (c) Merino is an exotic breed of sheep.

- (d) Hair present on body of wool-yielding animals trap a lot of air.

5. Match column I with column II and select the correct option from the codes given below.

Column I (Material)	Column II (Smell on burning)
(A) Silk	(i) Burning plastic
(B) Wool	(ii) Charred meat
(C) Nylon	(iii) Burning hair

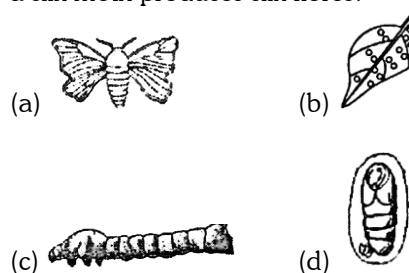
- (a) (A) - (i), (B) - (ii), (C) - (iii)
- (b) (A) - (iii), (B) - (i), (C) - (ii)
- (c) (A) - (iii), (B) - (ii), (C) - (i)
- (d) (A) - (ii), (B) - (iii), (C) - (i)

6. The given table enlists types of silk (P) and plants on the leaves of which the related silkworm feeds (Q). Select the option which completes the table.

P	Q
Mulberry	Mulberry
Muga	X
Eri	Y
Tussar	Z

	X	Y	Z
(a)	Som	Castor	Arjun
(b)	Arjun	Castor	Sal
(c)	Sal	Saja	Arjun
(d)	Castor	Sal	Som

7. Which of the following stages in the life history of a silk moth produces silk fibres?



8. Wool industry is an important means of livelihood for many people in our country. But sorters' job is risky as sometimes they get infected by a ____ called ____, which leads to a fatal lung disease called sorter's disease.
- (a) Bacterium, Bacillus anthracis
 - (b) Bacterium, Escherichia coli
 - (c) Fungus, Salmonella typhimurium
 - (d) Virus, Vibrio anthracis

9. Pick the odd one out from each series given below and select the correct option.

- (i) Muga, Kosa, Cashmere, Tussar
(ii) Larva, Pupa, Silk moth, Tadpole
(iii) Patanwadi, Marwari, Pashmina, Lohi

(i)	(ii)	(iii)
(a) Muga	Pupa	Patanwadi
(b) Cashmere	Tadpole	Pashmina
(c) Cashmere	Larva	Marwari
(d) Kosa	Sheep	Lohi

10. Which of the following options does not represent a property of wool?

- (a) Wool is an elastic fibre.
(b) Wool can absorb moisture.
(c) Wool is a poor conductor of heat.
(d) While burning wool gives the smell of burning paper.

11. In the given table, identify the correct match of name of breed, quality of wool and state where the breed is found.

	Name of breed	Quality of wool	State where found
(i)	Lohi	Good quality wool	Rajasthan, Punjab
(ii)	Rampur bushair	For woollen shawls	Jammu and Kashmir
(iii)	Patanwadi	Coarse wool	Uttar Pradesh, Himachal Pradesh
(iv)	Nali	Carpet wool	Rajasthan, Haryana

- (a) (i) and (ii) only (b) (i) and (iv) only
(c) (ii) and (iii) only (d) (iii) and (iv) only

12. Which of the following statements are correct regarding sericulture?

- (i) After hatching, the silkworms are fed on freshly chopped mango leaves.
(ii) The silk fibre is obtained from the cocoons by a process known as reeling.
(iii) If an adult is allowed to emerge out from cocoon, the cocoon becomes useless for silk production.

- (a) (i) and (ii) only (b) (i) and (iii) only
(c) (ii) and (iii) only (d) (i), (ii) and (iii)

13. Read the given paragraph carefully.

The female silk (i) lays eggs. When an egg hatches, a tiny caterpillar called silkworm or (ii) crawls out. It feeds on leaves and grows. When it is ready to enter the next stage in its life cycle, it secretes a fibre made of (iii), which hardens on exposure to air. This is the silk fibre. It covers itself completely with this fibre, to form a (iv). At this stage, the larva is called a (v). Which grows and changes inside the covering and, a few weeks later comes out as an adult.

Select the correct sequence of words to complete the above paragraph.

(i)	(ii)	(iii)	(iv)	(v)
(a) Moth	Larva	Protein	Pupa	Cocoon
(b) Larva	Moth	Carbo-hydrate	Pupa	Cocoon
(c) Moth	Larva	Protein	Cocoon	Pupa
(d) Moth	Larva	Fat	Cocoon	Pupa

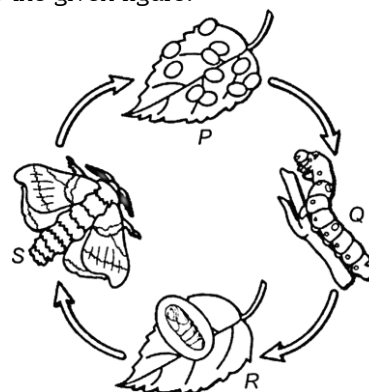
14. Read the given statements and select the correct option.

Statement 1: Shearing does not harm the sheep.

Statement 2: The uppermost layer of the skin is made up of dead cells.

- (a) Both statements 1 and 2 are true and statement 2 is the correct explanation; of statement 1.
(b) Both statements 1 and 2 are true but statement 2 is not the correct explanation of statement 1.
(c) Statement 1 is true but statement 2; is false.
(d) Both statements 1 and 2 are false.

15. Refer to the given figure.



At which labelled stage moulting occurs?

- (a) P only (b) Q only
(c) P and R only (d) R and S only

Achievers Section (HOTS)

16. Swati take X fabric and burn it. She observes following properties of the fabric :

- (i) It burns but does not melt.
- (ii) It shrinks from flame.
- (iii) It gives the odour of charred meat while burning.
- (iv) It left residue after burning which is black, hollow, irregular bead that can be easily crushed to a gritty black powder.
- (v) It is self-extinguishing.

According to her observation, X could be

- (a) Silk
- (b) Jute
- (c) Cotton
- (d) Nylon

- 17.** Read the following statements carefully and select the option which correctly identifies the true (T) and false (F) statements.

- (i) Synthetic fibres are the fibres that are made from chemicals.
- (ii) Angora wool is obtained from Angora rabbit.
- (iii) The wool obtained from Patanwadi breed of goat is used for hosiery.
- (iv) Silk is the weakest of all natural fibres.

	(i)	(ii)	(iii)	(iv)
(a)	T	T	F	F
(b)	F	F	T	T
(c)	T	T	T	F
(d)	F	T	T	T

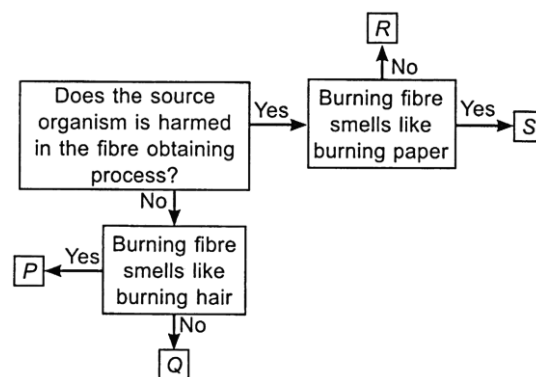
- 18.** Read the following statements,
- (A) The plant fibres are made up of ____ which is a structural material in the plant world,
- (B) The process of taking out threads from the cocoon to use as silk is called as ____
- (C) The sheared hair of sheep is moved through tubes filled with soapy water to remove dust, dirt and grease. This is known as ____
- (D) Mohair, spun from the fleece of the Angora ____ is extremely light; weight.

Select the option which correctly fills the blanks in any two of the above statements.

- (a) (A) - Protein, (C) - Removal of burr
- (b) (B) - Rearing, (C) - Scouring

- (c) (A) - Cellulose, (D) - Goat
- (d) (B) - Reeling, (D) - Rabbit

- 19.** Refer to the given flow chart and select the correct statement regarding P, Q, R and S.



- (a) P is the strongest natural fibre.
- (b) Q is made up of protein while R is made up of cellulose.
- (c) S is obtained from salivary gland of source organism.
- (d) R is composed of fibroin and sericin.

- 20.** Following is a random sequence of steps in the processing of wool. Arrange these steps in the correct sequence and select the correct option.

- (i) Scouring
- (ii) Sorting
- (iii) Shearing
- (iv) Removing burrs
- (v) Dyeing
- (vi) Yarn
- (vii) Spinning
- (viii) Weaving
- (ix) Fabric
- (x) Carding

- (a) (iii) → (i) → (ii) → (iv) → (x) → (v) → (vii) → (vi) → (viii) → (ix)
- (b) (iii) → (ii) - (i) → (iv) → (v) → (x) → (vii) → (vi) → (viii) → (ix)
- (c) (iii) → (ii) → (i) → (iv) → (x) → (v) → (vii) → (vi) → (viii) → (ix)
- (d) (iii) → (i) → (iv) → (ii) → (v) → (x) → (vii) → (vi) → (viii) → (ix)

Answer key

1. C	2. C	3. C	4. A	5. D
6. A	7. C	8. A	9. B	10. D
11. B	12. C	13. C	14. A	15. B
16. A	17. A	18. C	19. D	20. A

HINTS & EXPLANATIONS

1. (c): Silk is a protein fibre. Cashmere wool is obtained from Cashmere goat.
2. (c) Not Available
3. (c): Carding is the process of brushing of raw or washed fibres to prepare them as textiles. It helps the fibres to get rid of tangles.
4. (a): Sericin is the gummy substance that holds the two strands of fibroin of a silk fibre; together.
5. (d) Not Available
6. (a) Not Available
7. (c): In the given question, option (a); represents the adult silk moth, (b) represents eggs laid by the moth, (c) represents larva and (d) represents the pupa of the silk moth. The larva produces silk fibres,
8. (a) Not Available
9. (b): Muga, Kosa and Tussar are types of silk while Cashmere is a type of wool. Larva, pupa and silk moth are the stages in the life cycle of silk moth while tadpole is the stage in the life cycle of frog. Patanwadi, Marwari and Lohi are types of wool obtained from sheep while pashmina is a type of wool obtained from goat.
10. (d): Wool does not catch fire easily. It burns slowly and gives the smell of burning hair. It is self-extinguishing.
11. (b) Not Available
12. (c): After hatching, the silkworms are fed on freshly chopped mulberry leaves.
13. (c) Not Available
14. (a) Not Available
15. (b): In the given figure of life cycle of silk moth P, Q, R and S refer to eggs, larva, pupa and adult moth respectively. Moulting occurs at larval stage.
16. (a) Not Available
17. (a): The wool obtained from Patanwadi breed of sheep is used for hosiery. Silk is the strongest of all natural fibres.
18. (c): (a) - Cellulose, (b) - Reeling, (c) - Scouring, (d) - Goat
19. (d): P, Q, R and S could be wool, cotton or coconut, silk and jute respectively. Silk is the strongest natural fibre. Animal fibres are made up of protein while plant fibres are made up of cellulose. Silk is obtained from salivary gland of silk moth.
20. (a) Not Available