



INDIAN SCHOOL AL WADI AL KABIR



Class: VII	Department: SCIENCE 2021 - 22	Date of submission: 16.5.21
Worksheet No:3 WITH ANSWERS	Topic: FIBRE TO FABRIC	Note:A4 FILE FORMAT
NAME OF THE STUDENT	CLASS / SEC:	ROLL NO.

I. VERY SHORT ANSWER (1M):

1. What are fibres? (Hint: They are long, thin, flexible thread like structures used to make yarn)
 2. Define sericulture. [Hint: Production of raw silk by raising silkworms is called sericulture.]
 3. Where is silk yarn or thread obtained from? [Hint: From cocoon of the silk moth]
 4. What does wool yielding animals bear on their body? (Hint: Fleece /hair made of proteins)
 5. What are natural fibre? Explain the different types of natural fibre? (Hint: The fibre obtained from plants or animals. Plant-cotton,jute,coir. Animal-Wool, silk)
 6. Which is the most common silk moth? [Hint: Mulberry silk moth]
 7. What is Reeling? [Hint: The process of taking out thread from the cocoon for use as silk is called Reeling the silk.]
 8. What are yarns? [Hint: long continuous length of interlocked fibres are called yarns.]
 9. Name the different types of silk known to you. [Hint:Tassar silk,Mooga silk,Mulberry silk, Kosa silk]
 10. What are plant fibres? [Hint: Plant fibres are thread like filaments and structural material (cellulose) of plants. They are obtained from various parts of the plant. Eg. Cotton, Jute, Flax.
- For question numbers 11 to 13, two statements are given- one labelled Assertion (A) and the other labelled Reason (R).

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

- i) Both A and R are true and R is correct explanation of the assertion.**
- ii) Both A and R are true but R is not the correct explanation of the assertion.**
- iii) A is true but R is false.**
- iv) A is false but R is true**

11. Assertion (A): The rearing of silkworms is called sericulture.

Reason(R):. Silk worms are reared to obtain cocoons that produce silk fibre

- (i) Both A and R are true and R is correct explanation of the assertion.)**

12.Assertion(A) :The process of removing fleece from the sheep is called scouring.

Reason(R).: The fleece removed does not harm the animal

(iv: A is false but R is true)

13.Assertion(A): The process of selecting parents for obtaining special characters in their offspring, is termed ‘selective breeding’

Reason(R).: Selective breeding is done in silkworms.

(iii) A is true but R is false.

II - PASSAGE BASED QUESTIONS:

Silk moth is a large white insect. Egg is the first stage of a silkworm’s life cycle. The female moth lays its eggs during summer. The eggs hatch into larvae, which feed on tender mulberry leaves. This stage lasts for about 27 days and during this time the larvae shed their skin four times. The process of shedding the skin is called moulting. The larvae spin fine silk filament around it to form a cocoon and attains the pupal stage. The pupa changes into the moth which comes out of the cocoon and the cycle continues.

1.What is the first stage of a silkworm’s life cycle?

- i)Insect ii) Egg iii) Worm iv) Moth

2.What do the eggs hatch into?

- i)Pupa ii) Moth iii) Larvae iv) All of the above

3.Name the process of shedding the skin.

- i) Moulting ii) Shredding iii) Shearing iv) Scouring

4.Name the food eaten by the larvae of silk worm.

- i) Grass ii) Mulberry leaves iii) Mulberry fruit iv) None of the above

III.a) SHORT ANSWER TYPE QUESTIONS (2 M):

1. What do you mean by selective breeding?

[Hint: The process of selecting parents for obtaining special characters in their offspring, such as soft under hair in sheep, is termed as selective breeding.]

2. Why some animals have thick coat of hair on their body?

[Hint: Hair trap a lot of air. Air is a poor conductor of heat, it does not allow body heat to escape to the surrounding. So, hair keeps these animals warm.]

3. Why shearing is done only in summer?

[Hint: Sheep cannot survive without their coat of hair during winter.]

4. What type of feed (food) is given to sheep?

(Hint: Sheep are herbivores which feed generally on grass and leaves. Rearers also feed them corn, jowar, mixture of pulses, and oil cakes)

5. What is a cocoon?

- [Hint: The caterpillar completely covers itself by silk fibres and turns into pupa. This covering is known as **cocoon**.]

III. b) SHORT ANSWER TYPE QUESTIONS (3 M):

1. What do you mean by the following terms?

a) Shearing	b) Sorting
Shearing	Sorting
The process of removal of the fleece of the sheep along with the uppermost layer of skin	The process of separating the fibers according to their size

2. Why is the silk fibre of mulberry silk moth preferred?

[Hint: The silk fibre obtained is soft, lustrous, and elastic and can be dyed in beautiful colours.]

3. The hair of an animal A are cut from its body in one piece along with a layer of its skin in the form of B. This process is called C. The B of this animal is then cleaned by using soap and lot of water by a process D. The cleaned B is then converted into yarn and then fabric by method E.

- What could be A and B?
- Name the process C, D and E.

[Hint: A- Sheep B- Fleece C- Shearing D- Scouring E- Knitting]

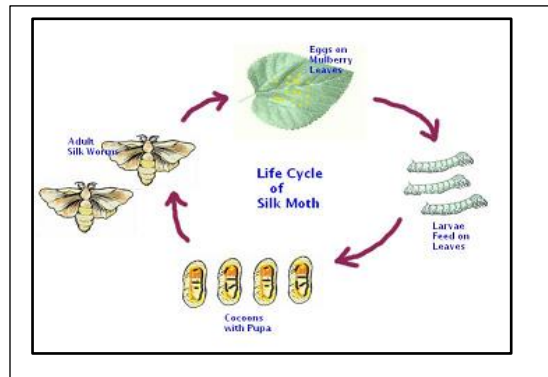
4. a) Identify the process shown in the adjacent picture (Hint: Scouring).



b) Explain the process. (Hint: The sheared skin with hair is thoroughly washed in tanks to remove grease, dust and dirt. This is called scouring. It is done by machines nowadays.)

IV. LONG ANSWER TYPE QUESTIONS (5 M):

a) Describe the life history of silk moth with the help of figures of various stages.



- The female silk moth lays eggs, from which hatch larvae which are called **caterpillars or silkworms**.
- They grow in size. When the caterpillar is ready to enter the next stage of its life history called **pupa**, it first weaves the net to hold itself. Then it swings its head from side to side in the form of figure eight (8).
- During these movements of head, the caterpillar secretes fibre made of a protein which hardens on exposure to air and becomes silk fibre.
- The caterpillar completely covers itself by silk fibres and turns into pupa. This covering is known as **cocoon**.

2.Paheli went to the market to buy saris for her mother. She took out a thread from the edge of the two saris shown by the shopkeeper and burnt them. One thread burnt with a smell of burning hair and the other burnt with the smell of burning paper. Which thread is from a pure cotton sari and which one from a pure silk sari? Give reason for your answer.

[Hint: In first sari, one thread which burnt with a smell of burning hair is from pure silk, silk and hair are protein fibres. So, on burning these threads, a smell of burning hair comes out. In second sari, second thread which burnt with the smell of burning paper is from a cotton sari. Since, cotton and paper both are cellulose and on burning, they give similar smell.]

3..Paheli wanted to buy a gift made of animal fibre obtained without killing the animal. Which of the following would be the right gift for her to buy- woolen shawl or silk scarf or leather belt?

[Hint: Silk scarf and leather belt is obtained by killing animal but wool is produced from shearing of skin of sheep.]

4.What qualities of silk makes it more preferable and costlier?

[Hint:

*It is soft smooth and lustrous.

*It is the strongest natural fibre.

*It absorbs moisture readily.

*It is cool to wear in summer and warm in winter }

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