INDIAN SCHOOL AL WADI AL KABIR		
Class: VII	DEPARTMENT: SCIENCE	DATE: 16-08-2023
	2023-24	
WORKSHEET	TOPIC: FIBRE TO FABRIC	NOTE: A4 FILE
WITH ANSWERS		FORMAT
NAME OF THE STUDENT:	CLASS & SEC:	ROLL NO.

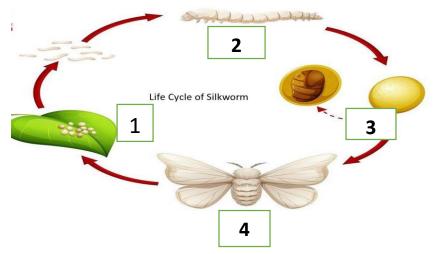
I. OBJECTIVE TYPE QUESTIONS(1M):

- 1. Selective breeding is a process of
 - a) selecting the offspring with desired properties
 - b) selecting the parents with desired properties
 - c) selecting an area for breeding.
 - d) selecting fine hair for good quality wool.
- 2. The clothes are made of thinner and thinner strands called
 - a) thread
 - b) yarn
 - c) fibre
 - d) fabric
- 3. Observe the picture and name the process carried out here



- a) removal of fleece-shearing
- b) separating hairs of different textures.
- c) washing of sheep fibre to remove grease.
- d) rolling of sheep fibre into yarn.

- 4. Man-made fibres or fibres that are produced in the laboratory are called
 - a) Natural fibres
 - b) Synthetic fibres
 - c) Thin fibres
 - d) None of these
- **5**. Which one of the following is a wool-yielding animal?
 - (a) Sheep
 - (b) Angora goat
 - (c) Camel
 - (d) All the above
- 6. Observe the figure and identify the stages of the silk moth in the correct order given below.



- (a) Cocoon with pupa- eggs- silkworm- adult moth
- (b) eggs- silkworm cocoon with pupa- adult moth
- (c)silkworm- cocoon with pupa eggs -adult moth
- (d) adult moth cocoon with pupa eggs -silkworm
- 7. The fibres which are obtained from plants and animals are called ______
 - a) natural fibres
 - b) synthetic fibres
 - c) mixed fibres
 - d) thin fibres
- 8. Which of the following processes is not a part of wool extraction?
 - (a) Shearing
 - (b) Scouring
 - (c) Sorting
 - (d) Reeling

- 9. The caterpillars of silkworms feed on
 - (a) peepal leaves
 - (b) grass
 - (c) rose leaves
 - (d) Mulberry leaves
- 10. The rearing of silkworms to obtain silk is called
 - (a) sericulture
 - (b) silk
 - (c) cocoon
 - (d) shearing

For questions 11, 12, 13 and 14 two statements are given- one is labelled as Assertion (A) and the other is labelled as 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 the 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): Selective breeding is the process of selecting parents for obtaining special characters in their offspring.

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

[(iii) A is true and R is false.]

12. **Assertion(A):** The sheep get infected by the bacterium anthrax which causes a fatal blood disease called sorters disease.

Reason(R): The fleece of sheep is reared only during the summer season.

- [ii) Both A and R are true but R is not the correct explanation of assertion.]
- **13. Assertion**(**A**): The rearing of silkworms is called sericulture.

Reason(R): The most common silk moth is the mulberry silk moth.

- [ii) Both A and R are true and R is not the correct explanation of assertion.]
- **14.** Assertion(A): The process of removing fleece from the sheep is called scouring.

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

[i) A is false but R is true.]

I. VERY SHORT QUESTIONS (2M):

- 1. Why do some animals have thick coats of hair on their body? [Hint: Hair traps a lot of air, as air is a poor conductor of heat, it does not allow body heat to escape to the surroundings. So, hair keeps these animals warm.]
- 2. Why is shearing done only in summer? [Hint: Sheep cannot survive without their coat of hair during winter, so shearing is done only in summer.]
- 3. What is natural fibre? Explain the different types of natural fibre. [Hint: The fibre obtained from plants or animals is called natural fibres. Plant fibre-Cotton, Jute. Animal fibre-Wool, Silk]
- 4. What is Reeling? [Hint: The process of taking out thread from the cocoon for use as silk is called Reeling the silk.]
- 5. Name the different types of silk known to you. [Hint: Tassar silk, Mooga silk, Mulberry silk, Kosa silk]
- 6. Name the two types of hairy skin found in sheep. [Hint- The coarse beard hair and fine soft-under hair]
- 7. 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 various colours.]

III. SHORT ANSWER TYPE QUESTIONS: (3M)

- 1. What are synthetic fibres? [Hint-The fibres that are made from chemical substances or which are not obtained from plant and animal sources are called synthetic fibres. For example: Polyester, nylon, acrylic etc.]
- 2. How are silkworms reared? [Hint- Silk moths are reared and their cocoons are collected to get silk threads. The eggs laid by the female silk moth are stored carefully on strips of cloth or paper. The eggs are kept under suitable conditions of temperature and humidity.]
- 3. a) Identify the process shown in the adjacent picture



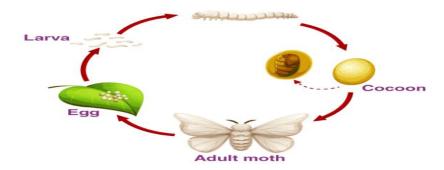
[Hint- Scouring]

- 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].
- 4. State the steps involved in making fabrics from fibres. [Hint- Fabrics are made from fibres in the following step (i) Fibres are first converted to yarn (ii) Fabric is made from yarn by the process of weaving and knitting.]
- 5. What do you mean by the following terms? a) Shearing b) Sorting

[Hint- a) Shearing is the process of removal of the fleece of the sheep along with the uppermost layer of skin. b) Sorting is the process of separating the fibres according to their size and texture.]

IV. LONG ANSWER TYPE QUESTIONS. (5M)

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



[Hint-• 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.
- During these movements of the head, the caterpillar secretes fibre made of a protein that hardens on exposure to air and becomes silk fibre.
- The caterpillar completely covers itself with silk fibres and turns into a pupa. This covering is known as a cocoon.]
- 2. A) 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- a woollen shawl silk scarf or leather belt? [Hint: Silk scarf and leather belt are obtained by killing animals, but wool is produced from shearing of sheep's skin]
- B) Four different types of fibres are given to us. Out of these, two fibres (1 and 2) are obtained from plants and the other two (3 and 4) fibres are obtained from animals. Fibre (1) is used in filling quilts and the yarn made of fibre (2) is used in making gunny bags, The yarn made from fibre (3) is used for knitting sweaters and yarn of fibre (4) is used for weaving saris. Name the four given fibres marked 1,2, 3 and 4.

[Hint-Fibre (marked 1) which is used in filling quilts is cotton and fibre (marked 2) is jute (cotton and jute are plant fibres).

Fibre (marked 3) is wool and fibre (marked 4) which is used for weaving saris is silk (wool and silk are animal fibres)].

- 3. What qualities of silk make 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]

V. SOURCE-BASED/ CASE STUDY-BASED QUESTION:

1. Divyank and Amar are working on a project report on 'Occupational Hazards'. They went to wool and silk production mills and visited mulberry farms for their research. They observed that due to improper working environment and lack of safety measures, there were many health hazards faced by the workers in their routine activities like respiratory disease, and skin infections. etc.

They discussed the problems faced by the workers with their teacher. A disease named Sorter's disease caused due to the anthrax bacterium was popular with all. Most of these hazards can be prevented by just having a proper awareness and knowledge of how to tackle such conditions. The main reason for occupational hazards in India is due to poverty, illiteracy and poor hygienic conditions

- (i) What occupational hazards are associated with the wool and silk industries? [Hint: Sorter's disease, respiratory disease.]
- ii) How can most of the occupational hazards be minimized? [Hint: Occupational hazards can be minimised by (a) taking precautions while handling animals like wearing gloves, mask, using disinfectants, washing hands, etc. (b)having proper knowledge and awareness of diseases caused by animals].
- iii) Name the bacterium responsible for causing Sorter's disease. [Hint-Anthrax bacterium]

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