Long Answer Questions

Q.1. Paheli went to the market to buy sarees for her mother. She took out a thread from the edge of the two sarees 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 saree and which one from a pure silk saree? Give reason for your answer.

[NCERT Exemplar]

Ans. The thread which burns with a smell of burning hair is from pure silk. This is because silk and hair are protein fibres, therefore, they produce similar smell on burning. Whereas cotton and paper both are carbohydrates, thus the thread which burns with the smell of burning paper is from cotton saree.

Q.2. Write various steps for processing fibres into wool.

[NCERT Exemplar]

Ans. The various steps for processing fibres into wool are as follows:

- **(a) Shearing**: The fleece of the sheep along with a thin layer of skin is removed from its body.
- **(b) Scouring:** The sheared skin with hair is thoroughly washed in tanks to remove grease, dust and dirt.
- **(c) Sorting:** The hairy skin is sent to a factory where hair of different textures are separated or sorted.
- (d) The small fluffy fibres, called burrs, are picked out from the hair.
- **(e)** The fibres can be dyed in various colours, as the natural fleece of sheep and goats is black, brown or white.
- **(f)** The fibres are straightened, combed and rolled into yarn.
- Q.3. Answer The following Quesitions.
- Q. Why it hurts when someone pulls his hair but not when he goes for a haircut?

Ans. Hair is made up of proteins, which are dead cells. They are attached to the scalp with living cells, from where they grow. So, while getting a haircut a person does not feel pain because dead cells are being cut, but when it is pulled from scalp the living cells are also being pulled along.

Q. Why a cotton garment cannot keep us as warm in winter as a woollen sweater can?

Ans. Woollen sweater traps air in between whereas cotton allows the air to pass through it. Air being a bad conductor of heat does not let body heat to escape beyond the sweater. Therefore, it is much warmer.

Q.4. Give reasons for the following:

Q. Light coloured cotton clothes are preferred to be worn in summers.

Ans. Light colours are poor absorbers of heat. So, in summers they keep us cool.

Q. Shearing does not hurt a sheep.

Ans. During shearing the uppermost layer of sheep's skin which is dead is removed. Therefore, it does not hurt the sheep.

Q. We wear different types of clothes in different weathers.

Ans. We wear clothes according to the climate. In summers we wear clothes that keep us cool and in winters we wear clothes which keep us warm.