

## Chapter 3: Synthetic Fibers and Plastics

1. Cotton is a natural polymer. What is its chemical name?
2. A synthetic fiber which looks like silk is obtained by chemical treatment of wood pulp. It is, therefore, known as artificial silk.  
What is its common name?
3. Terrycot is made by mixing two types of fibres. Write the names of the fibres.
4. Plastic articles are available in all possible shapes and sizes. Can you tell why?
5. Plastic is used for making a large variety of articles of daily use and these articles are very attractive. But it is advised to avoid the use of plastic as far as possible. Why?
6. Why is it not advisable to burn plastic and synthetic fabrics?
7. Select the articles from the following list which are biodegradable.
  - (a) paper
  - (b) woolen clothes
  - (c) wood
  - (d) aluminium can
  - (e) plastic bag
  - (f) peels of vegetables
8. A bucket made of plastic does not rust like a bucket made of iron. Why?

## Short Answer Type Questions

1. Rohit took with him some nylon ropes, when he was going for rock climbing. Can you tell why he selected nylon ropes instead of ropes made of cotton or jute?
2. A lady went to the market to buy a blanket. The shopkeeper showed her blankets made of acrylic fibres as well as made of wool. She preferred to buy an acrylic blanket. Can you guess why?
3. PVC (polyvinyl chloride) is a thermoplastic and is used for making toys, chappals, etc. Bakelite is a thermosetting plastic and is used for making electrical switches, handles of various utensils, etc. Can you write the major difference between these two types of plastics?
4. Fill in the blanks.
  - (i) A polymer is a chain of many small units joined together which are called \_\_\_\_\_.
  - (ii) The synthetic fibres are also known as \_\_\_\_\_ fibres.
  - (iii) The first fully synthetic fibre was \_\_\_\_\_.
  - (iv) A fibre similar to wool is \_\_\_\_\_.
  - (v) A plastic used for making crockery is \_\_\_\_\_.
5. Match items in List A with the items of list B.

### List A

- (a) nylon
- (b) PET
- (c) rayon
- (d) thermosetting plastics
- (e) teflon

### List B

- (i) non-stick coating
- (ii) electric switches
- (iii) parachutes
- (iv) polyester
- (v) artificial silk

6. Unscramble the jumbled words given below, related to synthetic materials.
  - (a) anory
  - (b) lopmery
  - (c) relyteen
  - (d) laspict
  - (e) yespolter
  - (f) felton

### Long Answer Type Questions

1. Indicate whether the following statements are True or False. Also write the false statements in their correct form.
  - (i) The fabric terywool is obtained by mixing terylene and wool.
  - (ii) Synthetic fibres do not melt on heating.
  - (iii) It is risky to wear synthetic clothes while working in the kitchen.
  - (iv) Most of the plastics are biodegradable.
2. Write the importance of synthetic polymers in our life.
3. Despite being very useful it is advised to restrict the use of plastic. Why is it so? Can you suggest some methods to limit its consumption?
4. Write an activity to show that synthetic fibres are stronger than the cotton fibres.
5. Complete the crossword given below with the help of clues.



### Across

- o 1. Substance used as synthetic wool (7)
- o 2. A plastic used for making containers and carry bags (9)
- o 3. Substance made up of large number of smaller molecules (7)
- o 4. Another name for this compound is artificial silk (5)

## Down

- o 5. A type of fibre obtained naturally from cocoon (4)
- o 6. A synthetic fibre classified as polyester (8)
- o 7. A polymer used for making rope (5)