# **Synthetic Fibres and Plastic**

## **ORAL QUESTIONS**

#### A. Answer these questions orally.

- 1. What is the other name for man-made fibres?
- 2. Name any 2 synthetic fibres.
- 3. What does the word 'polymer' mean?
- 4. Name the first fully synthetic fibre.
- 5. Is acrylic a natural or a man-made fibre?
- 6. What are the four R's that we should follow as a responsible citizen?

### B. Rewrite the following statements correctly.

- 1. Plastics are biodegradable.
- 2. Nylon is also known as artificial silk.
- 3. Thousands of polymers join together to form a monomer.
- 4. The full form of PVC is polyvinylchlorine.
- 5. Thermoplastics do not soften or melt on heating.

## **PUZZLES/QUIZ**

#### C. Find nine terms that are related to Synthetic Fibres and Plastics.

М	Р	А	В	М	Р	В	R	А	В	С
А	0	Κ	V	L	0	L	А	D	А	Е
Е	L	Ν	Е	F	L	G	Y	х	K	L
х	Y	В	0	Ν	Y	L	0	Ν	Е	L
V	Е	С	Е	М	М	Е	Ν	Y	L	U
В	S	Е	Р	Е	Е	Х	Q	Е	Ι	L
М	Т	D	L	W	R	R	В	Q	Т	0
L	Е	S	х	С	Ι	Y	Z	А	Е	S
Е	R	Y	Е	В	Q	Е	Е	Y	Р	Е
Р	0	L	Y	S	Т	Y	R	Е	Ν	Е
Р	R	Р	L	А	S	Т	Ι	С	R	Т

## D. Fill in the blanks.

- 1. The full form of PET is \_\_\_\_\_
- \_\_\_\_\_ is another form of polyester. 2.
- 3. Acrylic is used as a cheap alternative to \_\_\_\_\_
- 4. Polymers can be \_\_\_\_\_ or \_\_\_\_\_
- 5. PVC is a \_\_\_\_\_

## **CLASS TEST**

## E. MCQ – Tick ( $\checkmark$ ) the correct option.

- 1. Which of these is a thermosetting plastic?
  - (a) PVC
  - (c) Bakelite
- 2. Which is not a property of rayon?
  - (a) It is a good absorbent
  - (b) It shrinks quickly
  - (c) It has silk-like appearance
  - (d) It is cool to wear
- 3. Which of the following statements is incorrect?
  - (a) Rayon and nylon are synthetic fibres
  - (b) Plastics are non-biodegradable
  - (c) Melamine is a thermoplastic
  - (d) Plastics can be reused
- 4. Which of these is not the property of polymers?
  - (a) They are strong
  - (b) They do not corrode
  - (c) They can be given different shapes
  - (d) They are biodegradable
- 5. Nylon is used to make
  - (b) Rain coats (a) Swim-wear (c) Tyres (d) All of these

- (b) Polythene (d) Polystyrene

#### F. Very short answer questions.

- 1. What is a monomer?
- 2. What is a polymer?
- 3. What is rayon?
- 4. What is polymerisation?
- 5. How was nylon first produced?
- 6. Name one of the most widely used synthetic fibre in the world.
- 7. Name the monomer of polyester.
- 8. Give any two uses of PET.
- 9. Why do you think plastics have such a wide range of uses?
- 10. Name the plastic used for making floor tiles and house pipes.

#### G. Short answers questions.

- 1. Differentiate between.
  - (a) Synthetic fibres and Natural fibres

SYNTHETIC FIBRES	NATURAL FIBRES

(b) Monomers and Polymers

MONOMERS	POLYMERS

(c) Linear polymers and Cross-linked polymers

LINEAR POLYMERS	CROSS-LINKED POLYMERS

- 2. What is the need for making polymers?
- 3. Are there any disadvantages of making polymers? Discuss them.

- 4. How is rayon obtained?
- 5. List the properties of rayon.
- 6. List the advantages of rayon.

- 7. List the various uses of rayon.
- 8. List the various properties of nylon.
- 9. List the various uses of nylon.
- 10. List the various properties of polyester.
- 11. What are the various uses of polyester?
- 12. List the properties of acrylic.
- 13. What are the advantages are disadvantages of the following properties of plastic.(a) Durability
  - (b) Resistant to chemicals

(c) Recyclable.

#### H. Long answer questions.

1. What are the special properties of plastics due to which they have wide range of uses?

2. What are the disadvantages of using plastics?

3. List the various measures to reduce plastic pollution.

4. What are the advantages of using synthetic fibres over natural fibres?

### **HOME ASSIGNMENT**

### I. Think and answer.

1. Ritu has the habit of throwing plastic bags very carelessly on the roads. Her mother told her not to so. Why?

2. Manjari advised her grandmother to not to wear synthetic clothes while working in the kitchen. Why?

3. We generally do not wear synthetic clothes in summer. Why?

4. Handles of saucepans are made of thermosetting plastics. What could be the reason.

## WORKSHEET

#### J. Give reasons for the following.

1. Rayon is also known as artificial silk.

2. Rayon is considered a synthetic fibre.

3. Nylon is used to make swim-wear and raincoats.

4. We should ensure proper disposal of plastic bags.

5. PVC is used to make covering around electrical wires.

6. PET is used to make water bottles and jars.

7. Plastic containers are used for storing food.