

# FIBRES AND PLASTIC

## WORKSHEET - 1

1. Pick the synthetic fibre out of the following? [1]  
(a) Cotton                      (b) Nylon                      (c) Jute                      (d) Wool
2. Which of the following is a source of rayon? [1]  
(a) Wool                      (b) PET                      (c) Wood pulp                      (d) Silk
3. Polycot is obtained by mixing [1]  
(a) nylon and wool                      (b) polyester and wool  
(c) nylon and cotton                      (d) polyester and cotton
4. Which is a thermosetting plastic? [1]  
(a) Melamine                      (b) Polythene                      (c) PVC                      (d) Nylon
5. The material similar to silk in appearance is [1]  
(a) Nylon                      (b) Rayon                      (c) Polyester                      (d) Terylene
6. The most suitable material for the preparation of handles of cooking utensils is [1]  
(a) Polythene                      (b) PVC                      (c) Nylon                      (d) Bakelite
7. Which of the following is not a common property of plastics? [1]  
(a) Non-reactive                      (b) Light in weight  
(c) Durable                      (d) Good conductor of electricity
8. Which of the following groups contain all synthetic substances? [1]  
(a) Nylon, Terylene, Wool                      (b) Cotton, Polycot, Rayon  
(c) PVC, Polythene, Bakelite                      (d) Acrylic, Silk, Wool
9. The material which is commonly used for making kitchen containers is [1]  
(a) PVC                      (b) Acrylic                      (c) Teflon                      (d) PET
10. Cotton is a natural polymer. What is its chemical name? [2]  
\_\_\_\_\_  
\_\_\_\_\_
11. A synthetic fibre which looks like silk is obtained by chemical treatment of wood pulp. It is, therefore, known as artificial silk. What is its common name? [2]  
\_\_\_\_\_  
\_\_\_\_\_
12. Terrycot is made by mixing two types of fibres. Write the names of the fibres. [2]  
\_\_\_\_\_  
\_\_\_\_\_
13. Plastic articles are available in all possible shapes and sizes. Can you tell why? [2]  
\_\_\_\_\_  
\_\_\_\_\_

14. Why is it not advisable to burn plastic and synthetic fabrics? [2]

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15. 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?

[3]

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16. Which of the following represents the correct match for items in Column A with those in Column B?

Column A

Column B

[3]

I. Nylon

(i) Thermoplastic

II. PVC

(ii) Thermosetting plastic

III. Bakelite

(iii) Fibre

(a) I-(ii), II-(iii), III-(i)

(b) I-(iii), II-(i), III-(ii)

(c) I-(ii), II-(i), III-(iii)

(d) I-(iii), II-(ii), III-(i)

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17. A bucket made of plastic does not rust like a bucket made of iron. Why? [3]

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18. 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? [3]

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19. Select the articles from the following list which are biodegradable. [3]

(a) paper

(b) woolen clothes

(c) wood

(d) aluminium can

(e) plastic bag

(f) peels of vegetables

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20. 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? [4]

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21. 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]

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22. Fill in the blanks. [5]

- (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 \_\_\_\_\_.

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# FIBRES AND PLASTIC

## WORKSHEET - 2

1. Pick the synthetic fibre out of the following? [1]  
(a) Cotton                      (b) Nylon                      (c) Jute                      (d) Wool
2. Which of the following is a source of rayon? [1]  
(a) Wool                      (b) PET                      (c) Wood pulp                      (d) Silk
3. Polycot is obtained by mixing [1]  
(a) nylon and wool                      (b) polyester and wool  
(c) nylon and cotton                      (d) polyester and cotton
4. Which is a thermosetting plastic? [1]  
(a) Melamine                      (b) Polythene                      (c) PVC                      (d) Nylon
5. The material similar to silk in appearance is [1]  
(a) Nylon                      (b) Rayon                      (c) Polyester                      (d) Terylene
6. The most suitable material for the preparation of handles of cooking utensils is [1]  
(a) Polythene                      (b) PVC                      (c) Nylon                      (d) Bakelite
7. Which of the following is not a common property of plastics? [1]  
(a) Non-reactive                      (b) Light in weight  
(c) Durable                      (d) Good conductor of electricity
8. Cotton is a natural polymer. What is its chemical name? [1]  
\_\_\_\_\_
9. Write the importance of synthetic polymers in our life. [2]  
\_\_\_\_\_  
\_\_\_\_\_
10. 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? [2]  
\_\_\_\_\_  
\_\_\_\_\_
11. Write an activity to show that synthetic fibres are stronger than the cotton fibres. [2]  
\_\_\_\_\_  
\_\_\_\_\_
12. A synthetic fibre which looks like silk is obtained by chemical treatment of wood pulp. It is, therefore, known as artificial silk. What is its common name? [2]  
\_\_\_\_\_  
\_\_\_\_\_
13. Terrycot is made by mixing two types of fibres. Write the names of the fibres. [2]  
\_\_\_\_\_  
\_\_\_\_\_

14. Plastic articles are available in all possible shapes and sizes. Can you tell why? [2]

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15. Why is it not advisable to burn plastic and synthetic fabrics? [2]

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16. A bucket made of plastic does not rust like a bucket made of iron. Why? [2]

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17. Rana wants to buy shirts for summer. Should he buy cotton shirts or shirts made from synthetic material? Advise Rana, giving your reason. [2]

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18. Give examples to show that plastics are noncorrosive in nature. [2]

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19. Unscramble the jumbled words given below, related to synthetic materials. [3]

- (a) anory                      (b) lopmery                      (c) relyteen  
(d) laspict                      (e) yespolter                      (f) felton

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20. 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?

[3]

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21. What are the disadvantages of wearing synthetic fabrics? [3]

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22. Match items in List A with the items of list B. [5]

**List A**

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

**List B**

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

(e) teflon

(v) artificial silk

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**23.** Indicate whether the following statements are True or False. Also write the false statements in their correct form. [4]

- (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.

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**24.** 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 major difference between these two types of plastics? [4]

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**25.** Explain why plastic containers are favoured for storing food. [4]

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**26.** Explain why the following are made of thermosetting plastics. [4]

- (a) Saucepan handles
- (b) Electric plugs/switches/plug boards

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**27.** (a) What are polymers? [4]  
(b) What type of polymer unit's arrangement are found in plastics?

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28. (a) What is full form of PVC and PET. [4]  
(b) Name the R's in 4R principle.

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29. Fill in the blanks. [5]

- (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 \_\_\_\_\_.

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