

**Q1. What is a Fibre ?**

**A1. A fibre is a kind of thread which is woven to make a fabric.**

**Q2. How are fibres classified ? Give examples.**

**A2. Fibres are of two types – Natural fibres eg. Cotton , Wool, Silk and Synthetic fibres – Polyester , Nylon.**

**Q3. What is Polymerization reaction.**

**A3. The process of linking together of small monomers to form polymers is called polymerization.**

**Q4. Why is Rayon called artificial silk ?**

**A4. As Rayon resembles silk in its appearance, texture and shine, so it is called artificial silk.**

**Q5. Name the raw materials used to make Nylon and Rayon.**

**A5. Nylon – Coal, water and air**

**Rayon – Wood pulp**

Explain why some fibres are called synthetic.

Answer:

There are some fibres that are prepared by man by using chemicals. These are called synthetic fibres. These are made of small units that join together to form long chains. Examples of synthetic fibres are rayon, nylon, polyester, acrylic, etc.

Question 2:

Mark (✓) the correct answer.

Rayon is different from synthetic fibres because

- (a) it has a silk-like appearance.
- (b) it is obtained from wood pulp.
- (c) its fibres can also be woven like those of natural fibres.

Answer:

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- (a) it has a silk-like appearance.
- (b) it is obtained from wood pulp. ✓
- (c) its fibres can also be woven like those of natural fibres.

Question 3:

Fill in the blanks with appropriate words.

- (a) Synthetic fibres are also called \_\_\_\_\_ or \_\_\_\_\_ fibres.
- (b) Synthetic fibres are synthesised from raw materials called \_\_\_\_\_.
- (c) Like synthetic fibres, plastic is also a \_\_\_\_\_.

Answer:

- (a) Synthetic fibres are also called artificial or man-made fibres.
- (b) Synthetic fibres are synthesised from raw materials called petrochemicals.
- (c) Like synthetic fibres, plastic is also a polymer.

**Answer :**

- (a) Synthetic fibres are also called artificial or man-made fibres.
- (b) Synthetic fibres are synthesised from raw materials called petrochemicals .
- (c) Like synthetic fibres, plastic is also a polymer .
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**Q4 : Give examples which indicate that nylon fibres are very strong.**

**Answer :**

Nylon fibres are very strong. It is used for making ropes used for climbing rocks and for making parachutes. Their usage shows that nylon fibres have high tensile strength.

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**Q5 : Explain why plastic containers are favoured for storing food.**

**Answer :**

The characteristics that make plastics favourable for storing food items are:

- (i) Light weight
- (ii) Lower price
- (iii) Good strength
- (iv) Easy handling

Give examples to show that plastics are non-corrosive in nature.

Answer:

Plastics are not corroded even if they come in contact with strong chemicals. This is because of their non-reactive nature with most materials. For example, the cleansing chemicals that we use at home are stored in plastic bottles, instead of metal containers.

Question 11:

Should the handle and bristles of a tooth brush be made of the same material? Explain your answer.

Answer:

No. The handle and bristles of a tooth brush should be made of different materials. The handle of a toothbrush should be hard and strong, while the bristles should be soft and flexible.

Question 12:

'Avoid plastics as far as possible'. Comment on this advice.

Answer:

Plastics are non-biodegradable. Once introduced into the environment, they take several years to decompose. Plastics add to the environmental pollution. They cannot be burnt as when burnt, they release poisonous gases. Plastic bags thrown in the garbage dump are swallowed by animals like cows. These plastic bags choke their respiratory system and can even prove fatal. Therefore, we should avoid plastics as far as possible.