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STUDY MATERIAL SCIENCE

CLASS-VIII

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▸ Synthetic Fibre & plastics

Revision

* Natural fibres are obtained from plants or animals, while synthetic fibres are mostly polymers of chemical units prepared from petrochemicals.

*Several types of synthetic fibres are available. They include rayon, nylon, polyester, acrylic and many more.

*The various types of fibres differ from one another in strength, water absorbing capacity, nature of burning, cost, durability, etc.

* Plastics have become increasingly important in our everyday lives because they are light, durable and can be easily moulded into various shapes.

* Plastics are also increasingly being used as a substitute for metals in automobile and aircraft industry because they are lightweight, have greater strength and are resistant to corrosion.

* Since plastics are highly durable, it makes them almost indestructible and hence creates a problem for the environment.

*** ASSIGNMENT :**

1. Answer the questions.

- a. What is the source of raw materials used in the manufacture of synthetic polymers?
- b. Why is rayon not considered a synthetic fibre?
- c. What are the differences between the thermoplastics and thermosetting plastics?
- d. Why are plastics used for covering electric wires and making handles of cooking pans and screwdrivers?
- e. Why should plastic bags never be thrown into the garbage bin or the drain?

2. Fill in the blanks.

- a. All fibres are materials called _____.
- b. Rayon is usually classified as a _____ fibre.
- c. Polycot, polywool and polysilk are blends of _____ with cotton, wool and silk, respectively.
- d. Acrylics used as a substitute for wool in winter garments are made from a polymer called _____,
- e. Plastics do not break down into simpler substances when buried in the soil or left in a garbage dump and are classified as _____.