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- **I.** There are two types of fibres One is natural fibres which are obtained from natural sources e.g. Cotton, silk, wool and other is synthetic fibres which are man-made for example rayon, nylon, acrylic etc.
- **II.** A Synthetic Fibre is a chain of small units of chemical substance joined together. Many such single units combine to form single unit called Polymer.

III. Types of Synthetic Fibre

- 1. Rayon-Rayon is synthesized from wood pulp. Rayon resembles silk, so it is also known as artificial silk. Rayon can be dyed in different colours and is much cheaper than silk.
- 2. Nylon-Nylon was first commercially synthesized fibre. Nylon is synthesized from coal, water and air. Nylon is very strong and its fabric is like silk.
- 3. Polyester- Polyester, one of the most popular man-made fibres. It is made of repeating unit of a chemical called ester. It is widely used to make clothes.
- 4. Acrylic-Acrylic is a man-made fibre. Acrylic is known as artificial wool or synthetic wool because it resembles wool. Acrylic is cheaper than natural wool and can be dyed in various colour. This makes acrylic is very popular among other fabrics.

IV. Characteristics of Synthetic Fibres

- Synthetic fibres are cheaper than natural fibre.
- Synthetic fibres are stronger than natural fibre.
- Synthetic fibres are more durable than natural fibre.
- Synthetic fabrics are dried up in less time.
- Synthetic fibres are easy to maintain and wash.

V. Plastics

Plastic is a polymer that can be recycled, coloured, reused, mould or drawn into wires or various other shapes. Units of some plastics have linear arrangement

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while some plastics are formed by the cross linked arrangement of their units. Thus, plastic is used in making toys, suitcase, bags, cabinets, brush, chairs, tables, and many other countless items. Polythene is one of the most famous types of plastic, which is used in manufacturing of carry bags.

Types of Plastics

- 1. Thermoplastic: Plastics which can be easily bent or deform on heating are known as thermoplastic. PVC and Polythene are the examples of thermoplastics.
- 2. Thermosetting plastic: Plastics which do not get deformed or softened on heating when mould once, are called thermosetting plastics. Bakelite and melamine are the examples of thermosetting plastics.

Characteristics' of Plastics

- Plastic is a poor conductor of heat and electricity.
- Plastic does not react with air and water and with many of the chemicals.
- Plastics are light weight, durable, cheap and very strong.
- Plastics are non- biodegradable substances. It takes many years to get decomposed and sometimes does not get decomposed at all. Thus plastic is not environment friendly.
- Plastic does not rust.