

10) Give a brief account of the applications of conducting polymers.

Ans) • Electronics: Used in OLEDs, transistors, and solar cells for flexibility and conductivity.

• Energy storage: Act as electrodes in batteries and supercapacitors.

• Antistatic Coating: Prevents static on surfaces in electronics and textiles.

• Sensors: Detect gases, pH, and biomolecules.

20) Write the classification of polymer.

Ans) a) By Source

• Natural: Cellulose, rubber.

• Synthetic: PVC, nylon

• Semi-synthetic: Cellulose, acetate.

b) By Structure

• Linear: Polyethylene

• Branched: LDP

• Cross-Linked: Bakelite

c) By Polymerization

• Addition: Polyethylene

• Condensation: Nylon.