

Polymer Questions

How we can classify the polymers on the basis of

- a. SOURCES
 - b. TACTICITY
 - c. THERMAL PROPERTIES
 - d. INTERMOLECULAR FORCES
 - e. STRUCTURE
1. What is Polymerization? Explain Addition Polymerization. Identify type of polymerisation – (Polypropylene, Polyamide)
 2. What is Polymerization? Explain Condensation Polymerization. Identify type of polymerisation – (Polypropylene, Polyamide)
 3. What is Number average Molecular weight, Weight average Molecular weight and Polydispersity index?
 4. Give any two applications of the polymer mentioned below -
Polyethylene, PolyPropylene, Polystyrene, Polybutene, Spandex, Kevlar and Polyterephthalate
 5. Explain the working principle of following fabrication method with labelled diagram –
 - a. Compression moulding
 - b. Transfer moulding
 - c. Injection moulding
 - d. Extrusion moulding
 6. Explain compression moulding? For which type of polymer it is applicable?
 7. Which type of moulding is used for coating the wires used for insulation?
 8. What are conducting polymers? How we can classify it?
 9. Explain –
 - a. Intrinsic Conducting Polymer
 - b. Extrinsic Conducting Polymer
 10. Write a note on Doped Conducting Polymers (DCP)
 11. What are Biodegradable Polymers? State the advantages of Biodegradable polymer

Nanomaterial Questions

1. What are Nanomaterials? How we can classify nanomaterials?
2. Explain –
 - a. Surface Effect
 - b. Quantum Effect
 - c.
3. What are top down and bottom up approach in synthesis of nanoparticles?
4. What are Fullerenes? Mention its properties and applications?
5. What are Quantum Dot?

6. Mention its properties and applications?
7. What are CNT's? Mention its properties and applications?
8. Explain the following methods of Carbon Nanotubes preparation –
 - a. Arc method:
 - b. Laser ablation Method
 - c. Chemical Vapour Deposition Method