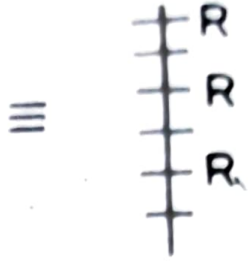
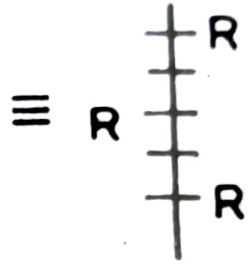
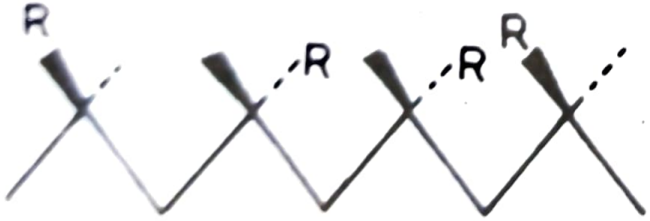
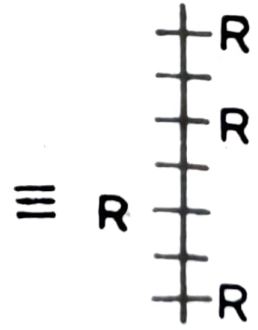
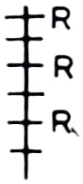
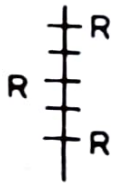
5. *Based on Tacticity (or Configuration)*

Polymer	*Structure*	*Model*	*Description*
Isotactic			Side groups are all on the same side
Syndiotactic			Arrangement of side groups is in alternating fashion
Atactic			Arrangement of side groups is at random around the main chain.

3. *Based on its behaviour when heated to Processing temperatures.* Polymeric mat rials are broadly divided into two categories on this basis *viz.* Thermoplastics (e.g PE, PP, PVC, Nylon, PET etc.) and thermosets (*e.g.*, PF, UF, MF, epoxy etc.).

4. *Based on end use.* These include : Fibers (*e.g.*, Polyester, Nylon etc.), Plasti (*e.g.*, Thermoplastics and Thermosets), Elastomers (*e.g.*, Rubber, Buna-S, Buna-N Polyurethane etc.), Films (*e.g.*, PP, LDPE, HDPE, PVC, PET etc.), Adhesives (e.g PVA, epoxy resin etc.), Paints (*e.g.*, epoxy etc.), Membranes (polyacetylene, poly aniline) etc.

5. *Based on Tacticity (or Configuration)*

Polymer	*Structure*	*Model*	*Description*
Isotactic		≡ 	Side groups are all on the same side
Syndiotactic		≡ 	Arrangement of side groups is in alternating fashion
Atactic		≡ 	Arrangement of side groups is at random around the main chain.

6. *Based on Origin.* Polymers may be Natural (