

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: M.Sc (Physical Chemistry)**  
**Semester: IV**  
**Syllabus with Effect from: June – 2013**

<b>Paper Code: PS04ECHE04</b>	<b>Total Credit: 4</b>
<b>Title Of Paper: Selected Topics in Polymers</b>	

Unit	Description in detail	Weightage (%)
I	Fundamental of paints Characteristic, properties of Pigments Formulation of Paints and Varnishes	25%
II	Synthetic Adhesives: Traditional, Pressure Sensitive and Hot melt Fibers: Block and Graft copolymers: Ion Exchange polymers:	25%
III	Water soluble Polymers: Preparation, Properties and Applications of modified cellulose and starch, Polyacrylamide, Polyvinyl pyrrolidone, Polyethylene oxide, Polyethylene imine	25%
IV	Engineering Plastics. Polyacetals, Poly butylene-terphthalate, Polyphenylene oxide, Polyphenylene sulfide, Polyether ketone, Polyether ether ether ketone (PEEK)	25%

**Basic Text & Reference Books:-**

- Paint manufacture By J. R. Kapuria
- Water Soluble Resins By - .Davidson and M-Sittings, Reinhold Book Corpn.
- High Temperature Resistance Polymers By -A.H.Frazer,Intersci. Publ.
- Flame Retardent Polymers By - M.Lewin, S.N.Atlas and E.M.Pearce, Plenum press
- Specialty polymers By-R. W.Dyson
- Chemical Technology of Fibrous MaterialsBy - F.Sadov, MN.Korchagin and A.Matertsky
- Macromolecules, Vol. II By - H.GElias, Plenum Press, New York
- Ion-Exchangers By - KJDorfher, Walter de Grayter Publ.
- Chemical Processing of fibres and fabricsBy-M.Lewis and S.B.Sello, Marcel Dekker Inc.
- Specialty polymers By-R. W.Dyson
- Hand-book of Adhesives and SealantsBy - Edward M. Petrite M.C.Graw-Hill Pub

