

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

<b>Paper Code: PS04CIPC03</b>	<b>Total Credit: 4</b>
<b>Title Of Paper: Processing of Polymers</b>	

Unit	Description in detail	Weightage (%)
I	Rheology of Polymers, Rheological States of Polymer, types of mixing processes for Plastics, Compounding of polymers.	25%
II	Casting, encapsulation, Plastisol moulding, coating, Fiber reinforced plastics, Compression moulding, transfer moulding and reaction injection moulding, Extrusion, blow moulding, profiles, blown films, Cast films and netting.	25%
III	Injection moulding, injection blow moulding, Sandwich injection moulding and gas assist injection moulding, Thermoforming, Foaming processes, drawing and blowing, Adhesion and Welding, Static and Rotational moulding, calendaring.	25%
IV	Physical Testing of plastics & elastomers before and after processing, material selection and product design, finishing operations .	25%

**Basic Text & Reference Books:-**

- Plastic Engineering By - R.J.Crawford, Pergamon Press
- Principles of Polymer System By - R.S.Schwartz and S.H.Goodman
- Polymer Process Engineering By - R.G.Griskey
- Polymer Processing By - D.H.Morton-Jones, Chapman & Hall Inc.
- Plastics By - J.H.DuBois and F.W.John

