

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2018****Subject Code:2163407****Date:27/11/2018****Subject Name:Plastic Manufacturing Technology****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
<b>Q.1</b>	(a) Define Plastic Processing Techniques.	<b>03</b>
	(b) Define Weld line, flash & Warpage.	<b>04</b>
	(c) Compare :Thermoplastics Injection Molding with Thermoset Injection Molding Process.	<b>07</b>
<b>Q.2</b>	(a) Define Shot capacity & Injection Pressure.	<b>03</b>
	(b) Define back pressure ,Suck back & Drooling.	<b>04</b>
	(c) Explain the function of clamping system & its types.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(c) Write short on Injection Mould.	<b>07</b>
	(a) Explain compression moulding Process with neat sketch.	<b>03</b>
	(b) Explain the types of mold used in compression molding with diagram.	<b>04</b>
	(c) Write comparison b/w compression & transfer moulding process.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Explain about tie layer.	<b>03</b>
	(b) Explain screw nomenclature with neat diagram.	<b>04</b>
	(c) Explain faults, causes and remedies of transfer moulded article	<b>07</b>
<b>Q.4</b>	(a) What is L/D ratio and compression ratio.	<b>03</b>
	(b) Explain the function screen pack & breaker plate.	<b>04</b>
	(c) Write short note on types of dies used in extrusion.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) Differentiate b/w single stage & two stage blow moulding process.	<b>03</b>
	(b) Differentiate b/w single screw & twin screw extruder.	<b>04</b>
	(c) Explain the manufacturing process of RPVC pipe with line diagram.	<b>07</b>
<b>Q.5</b>	(a) Write short note on multilayer blow moulding process.	<b>03</b>
	(b) Write short note on pinch-off in blow moulding process.	<b>04</b>
	(c) What is stretch Blow Molding Process? Why it is used? Explain with advantages & disadvantages.	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) Explain the principle of thermoforming process.	<b>03</b>
	(b) Discuss matched die forming.	<b>04</b>
	(c) What is drape forming? Give the advantages of pressure forming over vacuum forming.	<b>07</b>

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