

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2018**

**Subject Code: 2163407**

**Date: 03/05/2018**

**Subject Name: Plastic Manufacturing Technology**

**Time: 10:30 AM to 01:00 PM**

**Total Marks: 70**

**Instructions:**

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

		<b>MARKS</b>
<b>Q.1</b>	(a) Define: Plastics Processing Techniques.	<b>03</b>
	(b) Explain injection moulding process & its cycle time.	<b>04</b>
	(c) Explain any five common injection molding defects with its cause & remedies.	<b>07</b>
<b>Q.2</b>	(a) Explain back pressure, suck back & drooling.	<b>03</b>
	(b) Differentiate b/w hydraulic clamping & toggle clamping.	<b>04</b>
	(c) Write short note on Technical specification of injection moulding machine.	<b>07</b>
<b>OR</b>		
	(c) Write comparison b/w compression & transfer moulding process.	<b>07</b>
<b>Q.3</b>	(a) Write the advantages of transfer moulding process over compression molding process.	<b>03</b>
	(b) Explain compression moulding process.	<b>04</b>
	(c) Write short note on compression moulds with diagram.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Write the applications of extrusion process.	<b>03</b>
	(b) Explain heating & cooling system in extrusion process.	<b>04</b>
	(c) Write short note on types of dies used in extrusion.	<b>07</b>
<b>Q.4</b>	(a) Explain the function of screen pack & breaker plate.	<b>03</b>
	(b) Explain shark skin, melt fracture & bam boeing.	<b>04</b>
	(c) Write short note on Blown film plant.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) Explain about tie layer.	<b>03</b>
	(b) Discuss different types of materials used for blow moulds.	<b>04</b>
	(c) Explain Blow moulding process & give its classification.	<b>07</b>
<b>Q.5</b>	(a) Explain extrusion blow moulding process.	<b>03</b>
	(b) Differentiate b/w extrusion blow moulding process & injection blow moulding process.	<b>04</b>
	(c) Explain parision programming.	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) Write the principle of thermoforming process.	<b>03</b>
	(b) Discuss Matched Die forming.	<b>04</b>
	(c) Explain pressure forming process with neat sketch.	<b>07</b>