

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2163407****Date:16/05/2019****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

		MARKS
Q.1	(a) Define: Plastics Processing Techniques. Explain the selection criteria for choosing a particular processing method?	03
	(b) Explain injection moulding process & its cycle time.	04
	(c) Explain nomenclature of injection moulding screw & Function of each zone.	07
Q.2	(a) Define Max. Daylight & Shot capacity.	03
	(b) Differentiate b/w hydraulic clamping & toggle clamping.	04
	(c) Explain any five common injection molding defects with its cause & remedies.	07
	OR	
	(c) Write short on Feeding system & Cooling system in Injection mould.	07
Q.3	(a) Explain Transfer moulding process with neat sketch.	03
	(b) Explain the types of mold used in compression molding with diagram.	04
	(c) Explain up-stroke & down-stroke compression moulding machine.	07
	OR	
Q.3	(a) Explain applications of extrusion process.	03
	(b) Differentiate b/w Single screw & Twin screw extruder.	04
	(c) Explain shark skin, melt fracture & bam booning.	07
Q.4	(a) Explain blow moulding process & classify it.	03
	(b) Write short note on materials used for blow moulds.	04
	(c) Explain parison programming with neat sketch.	07
	OR	
Q.4	(a) Explain the function of thrust bearing in extruder.	03
	(b) Differentiate b/w blown film & cast film.	04
	(c) Write short note on stretch blow moulding process.	07
Q.5	(a) Write the principle of thermoforming process.	03
	(b) Explain Plug assisted thermoforming process.	04
	(c) Explain Drape forming process.	07
	OR	
Q.5	(a) Explain about tie layer.	03
	(b) Explain faults, causes and remedies of blow moulding process.	04
	(c) Explain faults, causes and remedies of thermoforming process.	07
