

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2182308****Date:09/05/2019****Subject Name:Plastic Product Design****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
<b>Q.1</b>	(a) Define : Short term properties ; Bosses, Ribs	<b>03</b>
	(b) Describe factors to be considered while designing the product.	<b>04</b>
	(c) List various steps followed in preliminary product design.	<b>07</b>
<b>Q.2</b>	(a) Explain plastic product design consideration related to Taper or Draft.	<b>03</b>
	(b) Importance of material selection criteria while designing the product.Discuss	<b>04</b>
	(c) List out various contents included in an ideal check list of plastic product design.	<b>07</b>
	<b>OR</b>	
	(c) Discuss the procedure for designing over head water storage tank(capacity 15,000 lit).	<b>07</b>
<b>Q.3</b>	(a) Explain plastic product design consideration related to Tolerance.	<b>03</b>
	(b) Importance of long-term properties in plastic product design.	<b>04</b>
	(c) Explain plastic product design consideration related to Fillets and Radii.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Explain plastic product design consideration related to Ribs.	<b>03</b>
	(b) Explain plastic product design consideration related to Under- cut	<b>04</b>
	(c) Discuss the procedure for designing Car bumper.	<b>07</b>
<b>Q.4</b>	(a) Explain plastic product design consideration related to Tolerance	<b>03</b>
	(b) Explain plastic product design consideration related to size and location of Gate	<b>04</b>
	(c) Discuss the procedure for designing contact lens.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Explain plastic product design consideration related to Parting lines.	<b>03</b>
	(b) Explain plastic product design consideration related to Lettering and embossing.	<b>04</b>
	(c) Discuss the procedure for designing chemical reactor for concentrated acid	<b>07</b>
<b>Q.5</b>	(a) Discuss the procedure for designing milk-pouch.	<b>03</b>
	(b) Discuss the procedure for designing Tooth-Brush	<b>04</b>
	(c) Discuss the procedure for designing electrical cable coating wire.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) Discuss the procedure for designing wrist watch gear	<b>03</b>
	(b) Discuss the procedure for designing Helmet	<b>04</b>
	(c) Explain plastic product design consideration related to wall thickness.	<b>07</b>

\*\*\*\*\*