

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2162310****Date:21/05/2019****Subject Name:Plastic Packaging 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 Packaging. State the need for packaging.	03
	(b) Explain the types of Packaging.	04
	(c) List the advantages of using plastics in Packaging.	07
Q.2	(a) How is decoration important in packaging?	03
	(b) List the properties & applications of PVC used in packaging.	04
	(c) Explain the functions of packaging.	07
	OR	
	(c) State the properties & applications of HDPE for packaging applications.	07
Q.3	(a) What is the importance of color in packaging?	03
	(b) Explain briefly about drop test of plastics package.	04
	(c) Write in details about Hazards in packaging.	07
	OR	
Q.3	(a) State the properties of PP as a material used in packaging.	03
	(b) Explain the role of nanotechnology in packaging.	04
	(c) State the importance of barrier properties. Explain the procedure to determine barrier properties in packaging.	07
Q.4	(a) State the properties of Nylon to be used as a material for packaging.	03
	(b) Describe the vacuum metalizing technique for metallic coating on plastic package.	04
	(c) Explain the Hot Stamping process used in decorating plastic packaging.	07
	OR	
Q.4	(a) What is Controlled Atmosphere Packaging.	03
	(b) Describe about various mechanical tests carried out on packages.	04
	(c) Explain the blister packaging and skin packaging techniques.	07
Q.5	(a) How can packaging be a silent salesman? Explain.	03
	(b) What is retort packaging and Aseptic packaging?	04
	(c) Explain shrink wrap & stretch wrap packaging techniques.	07
	OR	
Q.5	(a) What is surface treatment? List the surface treatment methods and explain any one.	03
	(b) State the properties of PET to be used as a material to manufacture stretch blow molded bottles used for packaging.	04
	(c) List the properties and applications of LLDPE and its packaging applications.	07
