

GUJARAT TECHNOLOGICAL UNIVERSITY**B. E. Sem. - IV - Examination – June- 2011****Subject code: 142304****Subject Name: Plastics Packaging Technology****Date:13/06/2011****Time: 10:30 am – 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.

- Q.1** (a) Define Packaging. Explain in brief Purpose of Packaging. **07**
(b) List the types of Packaging and Explain any one in detail. **07**

- Q.2** (a) List the various material used for Packaging. List the advantages and limitation if Glass Packaging. **07**
(b) List the advantages and limitation if Plastics Packaging. **07**

OR

- (b) Define and Explain in brief about Barrier properties. **07**

- Q.3** (a) List types of Plastics films used for Packaging. Explain about Polypropylene film with properties and application. **07**
(b) Differentiate: Skin Packaging and Blister Packaging **07**

OR

- Q.3** (a) Define Shelf Life. List the factors affecting the Shelf Life of Packaged. Explain any one. **07**
(b) List the Hazards in Distribution of Package. Explain any two in brief. **07**

- Q.4** (a) List the types of Test carried out for Evaluation of Package. Explain about Drop Test in brief. **07**
(b) List the advantages & disadvantages of bio-degradable packaging. **07**

OR

- Q.4** (a) Write Short Note(Any Two) **07**
(1) Water Vapor Transmission Rate(WVTR)
(2) Controlled Atmosphere Packaging(CAP)
(3) Design Factors for Packaging.
(b) Explain in brief about Properties & application of LLDPE film. **07**

- Q.5** (a) Explain in brief about Retort Pouches. **07**
(b) List the types of Metal Packaging based on the nature of the products. Explain any one. **07**

OR

- Q.5** (a) Explain the procedure to measure the Tensile Strength of Plastics Film. **07**
(b) Compare: Wooden Packaging and Plastics Packaging. **07**
