GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-IV • EXAMINATION – SUMMER 2013

Subject Code: 142304Date: 17-06-20Subject Name: Plastic Packaging Technology			
Time: 10:30am – 01:00pm Total Marks: '			
 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 			
Q.1	(a) (b)	What is Packaging. What are the purposes of packaging? List the various material used for packaging. Enlist the advantages and disadvantages of each material?	07 07
Q.2	(a)	Define new product development. Explain the different involved in new product development?	07
	(b)	Discuss importance of glass in packaging. Discuss manufacturing, advantages and disadvantages?	07
	(b)	OR Discuss about the natural polymers involved in plastic ing?	07
Q.3	(a) (b)	What are the types of packaging and explain each type with suitable examples? Explain the various tests carried out for evaluation of package. Explain about Drop test in detail?	07 07
Q.3	(a) (b)	OR Define waste hierarchy? Enlist the steps involved in waste hierarchy? Differentiate between Skin and Blister packaging?	07 07
Q.4	(a) (b)	Explain various tests conducted on corrugated boards? Write short notes on (1) Shelf life (2) Logistics	07 07
Q.4	(a) (b)	OR What is Bag in Box Packaging. Discuss advantages of this kind of packaging? Write short notes on (1) Child resistant Packaging (2) Tetra Packs	07 07
Q.5	(a) (b)	 What is Biodegradable Packaging. Discuss its importance? Write short notes on (1) Water Vapour Transmission Rate(WVTR) (2) Controlled Atmosphere Packaging(CAG) 	07 07
Q.5	(a) (b)	Explain in brief about properties and applications of LLDPE films? Discuss importance of paper in packaging. Discuss manufacturing, advantages and disadvantages?	07 07
