GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–IV EXAMINATION – WINTER 2015

Subject Code: 142304   **Date:06/01/2016**
Subject Name: Plastics Packaging Technology
Time: 02:30pm to 05:00pm   **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)**	What are the functions of package? Explain in detail.	**07**
	(b)	What are the design fundamentals? Explain it in detail.	**07**
Q.2	**(a)**	Explain how packaging color is playing most important role as sales medium.	**07**
	(b)	How many different types of paper available for packaging? Explain them in detail with treatment of papers.	**07**

<div align="center">OR</div>

	(b)	With neat sketch Explain different types of styles and design available for Folding Cartons.	**07**
Q.3	**(a)**	Provide the different types of plastic available for packaging. Enlist advantages and disadvantages of plastic packaging.	**07**
	(b)	Enlist the different types of plastic films available for packaging. Explain LLDPE & PS film.	**07**

<div align="center">OR</div>

Q.3	**(a)**	What is meant by controlling of packaging atmosphere? Explain Vacuum Packaging and Active Packing Technology.	**07**
	(b)	Explain skin packaging with neat sketch. Explain in brief Blister and Pouch Packaging.	**07**
Q.4	**(a)**	Explain Cartoning system in detail.	**07**
	(b)	What is Regular Slotted Container (RSC) ? Enlist types of RSC. Draw and explain different types of Dividers, Liner, Pad and Support Block available in corrugated boxes.	**07**

<div align="center">OR</div>

Q.4	**(a)**	What is package wrapping Techniques? Explain Shrink Film Wrapping in detail.	**07**
Q.4	**(b)**	Enlist cushion materials available for cushion packaging. Explain them in detail.	**07**
Q.5	**(a)**	Where we required migration test? Explain with neat sketch Water Vapour Transmission Rate (WVTR).	**07**
	(b)	Explain different Testing done on Plastic Package.	**07**

<div align="center">OR</div>

Q.5	**(a)**	Explain Drop Testing in detail.	**07**
	(b)	Explain Vibration Testing in detail.	**07**