Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) - EXAMINATION - SUMMER 2016

Subject Code:2162310 Date:17/05/2016

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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		Short Questions	14
	1	What is Packaging?	
	2	What are essentials in a consumer package?	
	3	Who needs packaging?	
	4	What is transport packaging?	
	5	Difference between Primary and Secondary Packaging	
	6	Mechanical Hazards in Packaging	
	7	What are essential requirements of retail packaging?	
	8	What are the atmospheric factors that may cause the product to	
	U	deteriorate?	
	9	What effects can vibration have on [a] carbonated beverage	
		bottle[b] portable stereo recorder?	
	10	State the role of package in minimizing the effects on the	
		following products:	
		[a] a pack of butter	
		[b]a pack of biscuit	
	11	State the importance of colour as sales medium	
	12	What the methods of evaluation of shelf life of food products?	
	4.5		
	13	What is purpose of Labelling?	
	14	List some advantages of Plastic Packaging	
Q.2	(a)	What is retort package?	03
	(b)	List features of controlled atmosphere packaging	04
	(c)	Highlight advantages and limitations of Shrink wrap, Stretch	07
		wrap, Skin Package	
		OR	
	(c)	Which Plastic materials are preferred for film application?	07
		Highlight advantages and limitations of each	
Q.3	(a)	What are the advantages of metallizing over film?	03
	(b)	What are the critical factors affecting wooden container design?	04
	(c)	Discuss in detail the functions of a Package.	07
		OR	
Q.3	(a)	What is the difference between blister and skin packaging?	03
	(b)	How does package shape help its performance.	04
	(c)	Discuss features of a effective Design.	07
Q.4	(a)	What do you mean by Eco-Label? State its significance in export	03
-		marketing.	
	(b)	Enumerate the principles of Packaging.	04
	(c)	Explain the main hazards to which a transit package is exposed	07
		in [a] loading and unloading [b] warehousing [c] road transport	

OR

Q.4	(a)	State the changes brought by moisture on food products	
	(b)	Enumerate the features contributing to package as silent salesman.	04
	(c)	Outline the essential requirements you would consider in the graphic design of food package	07
Q.5	(a)	What are the essential features of good closures.	03
((b)	Distinguish between hermit pack and a seal.	04
	(c)	A drug manufacturer proposes to:	07
	. ,	[a] Fill 250 ml energy tonic for the children in the age group of	
		5-10 years in an attractive glass container.	
		[b] the product is sentitive to oxygen and water vapour	
		Describe with a sketch a suitable container for the above,	
		indicating the type of closure, sealing and label layout.	
		OR	
Q.5	(a)	Under what circumstances would you select MAP and CAP	03
		packaging.	
	(b)	Define [any four] : conformability , cohesive strength,	04
		delamination, dimensional stability, barrier properties, tack	
	(c)	Describe the various mechanical tests on packages	07
