Seat No.: _____

Enrolment No._____

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

Sub	oject	Code: 171401Date: 12/12/2015Name: Food Packaging Technology	
		0:30am to 1:00pm Total Marks: 70	
Inst	ruction 1. 2.	ns: Attempt all questions. Figures to the right indicate full marks.	
Q.1		 Answer the following in brief: i. What are the factors considered for selection of packaging materials? ii. What are the limitations of Oxygen barrier films? iii. Why lime stone is added for the glass manufacturing? iv. Discuss the effect of light on whole and skim milk? v. Explain "SARAN" plastic film. vi. "Packaging means value addition". For whom? And How? vii. 	02 02 02 02 03 03
Q.2	(a)	i. Discuss precautions to be taken while placing the order for metal cans?	03
	(b)	ii. "Packaging is Scientific and artistic segment of marketing." Explain?i. What is primrosing?	04 03
	(0)	ii. What causes deterioration of cheese? Suggest any one suitable packaging	03
		material for cheese.	0.
		OR	
	(b)	i. Expand and differentiate LDPE and LLDPE?	03
		ii. What are things to be preserved in health drinks? Suggest any one suitable packaging material for health drinks.	04
Q.3	(a)	What are the things deteriorate during storage in the durables and what are the attributes to be preserved in durables? How packaging can help them?	07
	(b)	i. Explain (a) Sugar Bloom and (b) Fat Bloom	04
		ii. Develop relationship between bulk density, porosity and true density. OR	03
Q.3	(a)	Prove that increase in the size of the spherical fruits will not affect the porosity of the packing in CFB boxes if fruit touches all the sides of the box?	07
	(b)	i. "Nature is the best packaging expert". Justify?	03
		ii. Write a note on different types of paper and multi layer paper used for packaging food materials?	04
Q.4	(a)	i. What is rational in packaging?	02
		ii. Discuss various types of metal base plates are used for food packaging.	05
	(b)	Draw a flow chart for making TFS plates. What are advantages and limitations of Edible films used in food packaging?	07

OR

Q.4	(a)	i. What are the role of liners in packaging material?	02
		ii. Differentiate between packaging and packing?	05
	(b)	Write a note on selective permeable packaging material?	07
Q.5	(a)	i. Differentiate between Tin plate container and Aluminum container.	02
		ii. What are the different types of flutes used in CFB boxes? What is there purpose?	05
	(b)	With the sketch explain the working of the Form, Fill and Seal machine used for packaging of food products?	07
		OR	
Q.5	(a)	i. Write a note on the OTS cans?	02
		ii. Write a note on Aseptic packaging? What are its merit over other packaging systems?	05
	(b)	Discuss Piston Type filling system used for liquid product with a well neat and labeled diagram.	07
