

Total number of printed pages: 50

B.Tech. (UG)/6thSemester/UFET601

2024

Food Packaging Technology

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions.

1.	a)	Explain various steps involve in the draw-redraw (DRD) technique used for making of two-piece tin can.	10
	b)	Explain various steps involve in drawn and wall ironed (DWI) technique used for making of two-piece tin can.	10
2.	a)	What is lacquering? Why metal can is lacquered/coated? Discuss about a few lacquering materials.	2+3+5
	b)	What is active scavenging (packaging) systems? Write the mechanisms carbon dioxide and ethylene scavengers.	10
3.		Write short notes on any four (4) of the followings	5x4
	a)	Polyethylene Terephthalate (PET)	5
	b)	Low density polyethylene (LDPE)	5
	c)	Bisphenol A	5
	d)	Types of packaging	5
	e)	Polytetrafluoroethylene (PTFE)	5
4.	a)	With the help of schematic diagram describe various steps of Blow and Blow process used for manufacturing of Glass bottles.	10
	b)	What is Bioplastic? What are the different types of Bioplastics? How bioplastics could be sustainable alternatives to the synthetic plastics?	2+3+5
5.	a)	Highlight on the advantages and limitations of glass as packaging material.	5
	b)	Food Packaging is referred as 'Silent Salesman'. Justify the statement.	5

	c)	Define Aseptic Packaging. How it is different from canning process?	5
	d)	Enlist the advantages and limitations of aluminum in food packaging.	5
6.			
		Differentiate between the followings: -	
	a)	Bioplastics and Plastics	10
	b)	Thermoplastics and thermosetting plastics	10
7.			
	a)	Write the principle and mechanisms of Freshness Indicators.	10
	b)	Write the principle and mechanisms of Gas (oxygen) Indicators.	10

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