Total number of printed pages:

Programme (PG)/2<sup>nd</sup> /PFET2111

## 2023

## UTILIZATION OF FOOD INDUSTRY BYPRODUCTS

Full Marks: 100

Time: Three hours

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

Answer **any five** questions.

1.	a)	Write potential examples of different value added products from fruit and	20
		vegetable processing industry by-products.	
2.	a)	Write briefly fermentative production of ethanol from sugarcane industry	14
		by-products molasses.	
	b)	What is pectin? Write its commercial applications.	3+3
3.	a)	Discuss briefly saccharification and fermentation process for vinegar	12
		production from food industry by-products.	
	b)	Briefly write about utilization of potato peels.	8
		ESTD.: 2006	
4.		Write about synthesis of furfural from bagasse. Mention commercial	20
		application of furfural.	n
5.	a)	Discuss about vermi compost formation from crop waste. What is the worm	12
		name?	
	b)	Which extraction methods are used for separation of azeotrope ethanol	8
		water mixture to get anhydrous alcohol? Mention the process names only.	
6.	a)	Write how tapioca processing waste is useful to produce biogas?	12
	b)	How processing/utilization of food industry waste is useful?	8
7.		Briefly write how different agricultural wastes are utilized to produce	20
		paper/board/packing materials.	