Seat N	lo.: _		Enrolment No	
		GUJARAT TECHNOL	OGICAL UNIVERSITY	
			AMINATION – WINTER 2012	
Suhi	ect (code: 171405	Date: 28/1	2/2012
•		Name: By-product Utilization		2/2012
-		· -	_	dras 70
		.30 am - 01.00 pm	Total Mar	:KS: /U
Instru				
		Attempt any five questions. Make suitable assumptions wherever neces	carv	
		Figures to the right indicate full marks.	sary.	
Q.1	(a)	Explain environmental laws relate	d to food industries.	07
	(b)	Describe by-product utilization of	milk industry waste.	07
Q.2	(a)	What is screening? Explain rotary	drum screen in detail.	07
	(b)	Explain flow equalization in detai	l.	07
			OR	
	(b)	O 1		07
Q.3	(a)			07
	(i) Give merits and demerits of anaerobic treatment methods.			
	(3.)	(ii) Explain environmental perform	_	0.0
	(b)	• •	ments.	02
		(ii) What is ISO 140001?		02
		(iii) Explain composting.	OB	03
0.3	(0)	Explain mimany treatment mather	OR	07
Q.3	(a) (b)			07
Q.4	(a)	1 7 1		
	(a)	(ii) List waste from fruits and vegetable processing.		
		(iii) Explain role of biogas in wast	<u> </u>	02 02
	(b)	· / 1	•	04
	()	(ii) Explain standard for disposal of industrial effluent.		
		1	OR	
Q.4	(a)	Describe fermentative utilization of	of food waste.	07
Q.4	(b)	Explain type of waste from food in	ndustries.	07
Q.5	(a)	Write short notes. (any two)		06
		(i) Waste water characteristics.		
		(ii) Effluent treatment plant.		
		(iii) Parameters related to water qu	ıality.	
	(b)			
		(i) Explain waste utilization of mango processing.		
		(ii) What is the use of average daily flow in design?		
		(iii) How will you measure discharge of waste water?		
		(iv) What is single cell protein?		
		(v) What will you measure to know pollution in water? OR		
Q.5	(0)			
	(a)	Answer the following. 0 (i) Draw flow chart of effluent treatment plant for dairy.		
		(ii) Draw a sketch of KVIC type biogas plant and describe it.		
	(b)	Define/explain following terms. (any seven) 07		
	(0)	(i) Treated water	(v) Animal feed	
		(ii) BOD	(vi) Cider	
		(iii) Air pollution	(vii) Natural colour	
		(iv) Whey	(viii) Carbon credit	
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