## B.Tech IV Year I Semester Examinations, March - 2017 INDUSTRIAL WASTEWATER TREATMENT

	I (Del		WATER INE	ATIVIENT	
Time	e: 3 hours	(Civii En	gineering)	_	
					lax. Marks: 75
Note	This question paper con	ntains two parts A	and B	· · · · · · · · · · · · · · · · · · ·	
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B					
consists of 5 Units. Answer any one full question from each unit. Each question					
	carries 10 marks and m	ay have a, b, c as	sub questions.		1
		, ,	- 1		
		Part. A	25 Marks)		
4751		I alt-A	25 Marks)	-margaret	2777
1.a)	What are the mineral a			****	1
,	What are the above 1				
b)	What are the physical properties of industrial wastes? [3]				
c)	2				
d)	What are the advantages of Equalization of Industrial Wastes? [3]				
e)	What do you mean by I	Vitrification?	0.5.	4.5	[2]
f)	Name the safe disposal		water		:: ::[3]
g)	What is the composition	n of Sugar Industr	v wastewater?	TATES	
h)	What is the second of the seco				
i)	What is the composition of Steel Industry wastewater?  [3]				
-	What are the advantages Joint treatments of Industrial Wastewater? [2]				
j)	What are the advantage	s of Common Effl	luent Treatment	:?	[3]
- 1		439.00	-72-27	7771 277	
\$		the fall			time that
		Part-B (5	0 Marks)		
2.a)	Enumerate the Special treatments required for treating the Industrial water and explain any				
	one of them in detail.				
b)	What are the difference	s hetween Industri	al and Municin	ol wastowatama?	re.en
***	Hat are the americance.		R	ai wasiewaiers?	[5+5]
3 27	What is manntike Cale			in the	,
J.a)	What is meant by Self	Purification of St	reams? And do	escribe the facto	rs that affect Self
1.	Purification of Streams.				
b)	Describe the problems arising when industrial waste waters discharged in to oceans.[5+5]				
4.a)					
7.3	Enumerate the basic t	heories of Indus	trial wastewate	er management	and explain the
	Enumerate the basic to Volume reduction.	95 PAPE	trial wastewate	er management	and explain the
ЬΫ	Volume reduction.	95 PAPE	trial wastewate	er management	
b)	Enumerate the basic to Volume reduction.  Write a detailed note on	Equalization.	vers on	er management	and explain the [5+5]
	Write a detailed note on	Equalization. O	R		
5.a)	Write a detailed note on Explain how recirculation	Equalization.  Output  On of wastewater i	<b>R</b> n industry is us		[5+5]
	Write a detailed note on	Equalization.  Output  On of wastewater i	<b>R</b> n industry is us		
5.a) b)	Write a detailed note on  Explain how recirculation  Explain how the oil will	Equalization.  Output  Output	<b>R</b> n industry is us Toatation.		[5+5]
5.a)	Write a detailed note on Explain how recirculation Explain how the oil will Differentiate the Nitrific	Equalization.  Output  On of wastewater in the separated by Fortium and Denitrification.	<b>R</b> n industry is us loatation. ication.	eful.	[5+5] [5+5]
5.a) b)	Write a detailed note on Explain how recirculation Explain how the oil will Differentiate the Nitrific	Equalization.  Output  On of wastewater in the separated by Fortium and Denitrification.	<b>R</b> n industry is us loatation. ication.	eful.	[5+5] [5+5]
5.a) b) 6.a)	Write a detailed note on  Explain how recirculation  Explain how the oil will	Equalization.  Output  On of wastewater in the separated by Fortium and Denitrification.	<b>R</b> n industry is us loatation. ication.	eful.	[5+5] [5+5] d in to rivers.
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5.a) b) 6.a)	Write a detailed note on  Explain how recirculation  Explain how the oil will  Differentiate the Nitrific Describe the problems a	Equalization.  On of wastewater is be separated by Feation and Denitributions when industrians when industrians of Phospheremoval of Phospheremoval	R n industry is us Toatation. fication. trial waste wate R hates from indu	eful.  ers are discharged strial waste wate	[5+5] [5+5] d in to rivers. [5+5]

8.a) Explain the sources of Sugar mill wastes and the recommended process for their Explain the sources of Food Processing industry wastes and the recommended process for b) their treatment. [5+5]9.a) Explain the sources of Steel Industry wastes and the recommended process for their Explain the sources of Petroleum Refinary wastes and the recommended process for their b) treatment. [5+5]10.a) Explain the Characteristics of Textile mill wastes and the recommended process for their b) Describe the treatment steps involved in the common effluent treatment plant. OR Explain the Characteristics of Tanneries wastes and the recommended process for their treatment. .b) ... What is the scope of Common effluent treatment plants? --00O00--