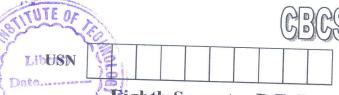
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CBCS SCHEME

17BT833

Eighth Semester B.E. Degree Examination, July/August 2021 Environmental Biotechnology

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

		Answer any FIVE full questions.		
1	a. b.	of the checks of water pollution on himans vegetation and mater: 1	s. (10 Marks) tems in detail.	
			(10 Marks)	
2	a. State the sources of heavy metal pollution. Discuss biosorption as a detoxification prodetail.			
	b.			
3	a.	Distinguish between Aerobic and Anaerobic processes. Elaborate the unit operathe processes.	ations in both	
	b.	Discuss the waste water treatment process on dairy and beverage industries.	(10 Marks) (10 Marks)	
4	a.	Discuss the use of genetically engineered microorganisms in waste water treatment.		
	b.	Write short notes on: i) COD ii) BOD.	(10 Marks) (10 Marks)	
5	a. b.	What are Xenobiotics? Discuss the biodegradation of pesticides. Elaborate the different methods of microbial treatment of oil pollution.	(10 Marks) (10 Marks)	
6	a. b.	Discuss the role of microorganisms in bioremediation process. Describe the process of phytoremidiation to clean up the environment.	(10 Marks) (10 Marks)	
7	a. b.	Elaborate on Isolated enzymes versus whole cell systems. Discuss the advantages and disadvantages of biocatalysts.	(10 Marks) (10 Marks)	
8	a.	List the different mechanistic aspects of enzymes. Explain any two models in det	o.i1	
		Explain any 2 biocatalytic reactions with examples.	an. (10 Marks) (10 Marks)	
9	a. b.	Explain the process involved in the microbial extraction of petroleum. Discuss the bacterial oxidation of chalcopyrite and pyrite.	(10 Marks) (10 Marks)	
10	a. b.	Explain the process of microbial desulfurization of coal. Analyze the process of extraction of uranium and gold from their ores.	(10 Marks) (10 Marks)	

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