M.Tech. Second Semester (Chemical Engineering) (CBS)

13015 : Elective Environmental Engineering & Waste Management : 2 CE 5

P. Pages: 1

Time: Three Hours



AW - 3454

Max. Marks: 80

Notes	: 1.	All question carry marks as indicated.	
	2.	Answer six questions in all.	
	3.	Due credit will be given to neatness and adequate dimensions.	
	4.	Diagrams and chemicals equations should be given wherever necessary.	
	5.	Illustrate your answer necessary with the help of neat sketches.	
	6.	Discuss the reaction, mechanism wherever necessary.	
	7.	Use of pen Blue/Black ink/refill only for writing the answer book.	
l .	What a	are the sources of water pollution? What are the effects of water pollution? Explain	13
2.	What are the different types of scrubbers used in chemical Industry? Explain their applications and working in brief.		
3.	Explain in detail the strategies undertaken to reduces vehicular emissions from vehicles by the Automobile industry and government.		
4.	Explain in detail the role of Air pollutants in ozone layer depletion. What are the effects of ozone layer depletion?		13
5.	Explai	n in detail the chemical methods of treatment of water and waste water.	14
6.	In which situation will you recommend the Reverse Osmosis method? Explain the process of Reverse Osmosis in detail.		
7.	What is safe drinking water? Explain in detail the UV ray method of disinfection of water and waste water? What are its advantages and disadvantages.		13
8.	Explain biological treatment of waste water by Rotating Biological contactors and Trickling filters in detail.		
9.	What a	are the different methods of pyrolysis? Explain low temperature pyrolysis process for	13
10.	How solution	are the different wastes affecting the environment? What could be the possible ons for environment protection?	14

