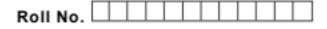
FirstRanker.com

www.FirstRanker.com

www.FirstRanker.com



Total No. of Questions : 08

Total No. of Pages : 01

M.Tech.(Bio Tech.)EL-II(2018 Batch) (Sem.-1) ENVIRONMENTAL ENGINEERING AND WASTE MANAGEMENT Subject Code : MTBT-109-18 M.Code: 75769

Time : 3 Hrs.

QL

Max. Marks : 60

6

## INSTRUCTIONS TO CANDIDATES : 1.Attempt any FIVE questions out of EIGHT questions. 2.Each question carries TWELVE marks.

	b)	What are the common air pollution control technologies available? Discuss any two	. 6
Q2.	a)	Define water pollution. What are the characteristics of effluents which needs reduc to get standard effluent?	tion 6
	b)	Describe the strategies to treat waste water.	6
Q3.	a)	How solid waste disposal can be achieved? Give its types and their methods of dispo	sal.
			6

a) Write in detail the sources of air pollution and their dispersion in the environment.

			<pre></pre>						
b) Describe the principal	and	working	mechanism	of	bag	filters,	Wet	scrubbers	and
centrifugal collectors.			< ·						6

## Q4. a) Write in detail the water quality modeling for streams. 6 b) What are waste recovery systems? How they are useful in waste management? 6

- Q5. a) Describe the production of various biofuels using microbes commercially. 6 b) What is bioremediation? Discuss its applications for sustaining the environment. 6
- Q6. a) Write the methods adopted for hospital waste management in detail. 6 b) How microbes are applied for degradation of hydrocarbons? 6
- Q7. a) Give comparison of primary, secondary and tertiary treatment methods of waste water. 6
- b) Describe the sources of water pollution and the strategies for their control. 6 Q8. Write notes on the following : a) Microbes for replenishing energy in the environment. 6
  - b) Biofilter technology and its applications. 6

## NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

1 M-75769



(\$35)-2233