

No. of Printed Pages : 03

Roll No.

CC-182

M. Tech. EXAMINATION, Dec. 2018

(Third Semester)

(B. Scheme) (Main & Re-appear)

(CHE)

CHE603B

ENVIRONMENTAL ENGINEERING AND
WASTE MANAGEMENT

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

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P.T.O.

Unit I

1. (a) Write a note on effect of change in climate on ecosystem and world economy. **10**
(b) Explain the concept of zero discharge of Effluent. **5**
2. Write notes on the following : **15**
 - (a) Global Warming
 - (b) Ozone Layer Depletion.

Unit II

3. Explain with sketches, the following air pollution equipments : **$7\frac{1}{2} \times 2 = 15$**
 - (a) Spray towers
 - (b) Cyclones.
4. Write a note on Atmospheric Stability and Temperature Inversions. **$7\frac{1}{2} \times 2 = 15$**

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Unit III

5. Discuss in detail about the physical unit processes commonly used in waste water treatment. **15**
6. Differentiate between Low rate and High rate trickling filters. Explain with the help of a neat sketch, working of trickling filters. **15**

Unit IV

7. (a) Describe the types based classification of solids waste. **7**
(b) Briefly discuss a solid waste system highlighting its functional elements. **8**
8. (a) Enlist the different pollutants released in environment due to Incineration. Briefly discuss their effects. **8**
(b) What are different equipments used for gas cleaning in solid waste system ? Explain fabric filters in detail. **7**

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