Unit IV

- 7. (a) Name the various methods of heavy metals remediation. Discuss one case study on the bioremediation of heavy metals.
 - (b) What are the waste elimination options?
- **8.** Write down the techniques available for remediation of radioactive waste. Discuss any one in detail with neat and clean diagram. **15**

No. of Printed Pages: 04 Roll No.

CC-602

M. Tech. EXAMINATION, May 2017

(Third Semester)

(Re-appear Only)

ESEM

ESEM-302-B

HAZARDOUS 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 at least *one* question from each Unit. All questions carry equal marks.

(3-18/12)M-CC-602 P.T.O.

Unit I

- Define Hazardous waste. Discuss the sources of HW. Write down the nine classes of HW according to US DOT classification giving the examples and symbols of each class.
- 2. (a) Name any *five* types of industries responsible for hazardous waste generation.Discuss textile industry with regards to hazardous waste production.10
 - (b) Define exposure potential. What are the various route of exposure to hazardous waste?

Unit II

3. (a) Write down the precautions needs to be taken at the time of labelling and collection of Hazardous waste.

M-CC-602 2

- (b) Define biomedical waste. Is all biomedical waste generated in hospitals hazardous? How shall we manage the biomedical waste?
- **4.** (a) What do you understand by E-Waste? "Management of E-Waste requires special attention". Comment on the statement.

10

(b) Write a short note on agricultural waste.

5

Unit III

- 5. What are the various problems encountered during the management of hazardous waste? Discuss the initiatives taken by the Indian Government to manage Hazardous waste. 15
- **6.** Explain the following:

 $7\frac{1}{2} \times 2 = 15$

- (a) Reverse osmosis
- (b) Activated Sludge process.

(3-18/13)M-CC-602

3

P.T.O.