| No. of Printed Pages: 03 | Roll No |
|--------------------------|---------|
|--------------------------|---------|

## G-150

## B. Tech. EXAMINATION, Dec. 2018

(Seventh Semester)

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

(CE)

CE463B

## INDUSTRIAL 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. Assume, if any missing data.

(2-15/5) M-G-150

P.T.O.

## Unit I 1. Write the significance of (a) BOD (b) COD (c) Turbidity (d) Hardness (e) Nitrogen. 2. Discuss (a) Population Equivalent (b) Housekeeping (c) Material change in process. 15 **Unit II** 3. What are aerobic and anaerobic biological treatments of waste? 15 4. Explain Ion-exchange process. 15 **Unit III** 5. Write the manufacturing process of: 15 Pulp and paper (a) Tanneries. (b)

**6.** Explain the flow chart of :

(a)

(b)

M-G-150

Chemical Industries

2

Sugar Industries.

|    |     | <b>U</b> 1              |    |
|----|-----|-------------------------|----|
|    | (a) | Dairy Industry          |    |
|    | (b) | Nuclear Plant.          |    |
| 8. | Exp | lain the flow chart of: | 15 |
|    | (a) | Fertilizers             |    |
|    | (b) | Dairy Industry.         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |
|    |     |                         |    |

3

**Unit IV** 

15

640

7. Write the manufacturing process of :

(2-15/6) M-G-150

15