

No. of Printed Pages : 03

Roll No.

CC-604

M. Tech. EXAMINATION, May 2018

(Third Semester)

(Re-appear Only)

(ESEM)

ESEM304B

WATER RESOURCE 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.

(3-27/16)M-CC-604

P.T.O.

Unit I

1. Explain the principles and approaches for surface and groundwater management. **15**
2. (a) Give justification for 'No life without water' considering present water scenario ? **10**
(b) How we can manage the decreasing ground water level ? **5**

Unit II

3. Write short notes on the following : **7½×2**
 - (a) Management of degraded surface water resources.
 - (b) Watershed management.
4. (a) Explain the different methods for recharging of ground water. **8**
(b) Discuss the two sides of dams. **7**

Unit III

5. (a) Secondary treatment is the biological treatment for waste water. Justify the above statement by considering any of two process of secondary treatment. **10**
(b) Explain the process of sedimentation. **5**
6. Write short notes on the following : **7½×2**
 - (a) Nitrate and phosphate removal
 - (b) Chemical and physical properties of industrial effluents.

Unit IV

7. (a) Explain the different techniques used for disinfection of water. **10**
(b) Write down the different uses of treated waster water ? **5**
8. Write short notes on the following : **3×5**
 - (a) Reverse osmosis
 - (b) Sludge disposal
 - (c) Drinking water quality.