

[Total No. of Questions - 5] [Total No. of Printed Pages - 2]  
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**B. Tech 5th Semester Examination**  
**Environmental Engineering-I (CBS)**

**CE-505**

**Time : 3 Hours** [www.epaper.tk](http://www.epaper.tk) **Max. Marks : 60**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

- Note :** (i) Question paper consists of five unit (Unit-A to Unit-E).  
(ii) Answering the question in Unit-E is compulsory.

**UNIT - A**

1. Briefly explain the important steps for determination of storage capacity of reservoir. (12)

OR

What are the factors governing the selection of the intake structure? Neatly explain reservoir and lake intake structure. (12)

**UNIT - B**

2. Write drinking water standards as per guidelines of BIS. (12)

OR

What do you mean by per capita demand and fluctuation of demand. (12)

**UNIT - C**

3. Draw the flow sheet showing sequence of various treatment units of a treatment plant with Perennial River as the source of water. List these treatment units sequentially. (12)

OR

Explain how you will prepare the sand to be used in the rapid sand filter from the available stock sand in case of a large water supply scheme. (12)

**UNIT - D**

4. Discuss with the help of neat diagrams types of distribution reservoirs. (12)

OR

Discuss the suitable water supply distribution system for rural area. (12)

**UNIT - E**

5. Answer all the parts of the question.
- (a) Define important significance of hardness in drinking water.
  - (b) Draw neat diagram of Bib and Stop cock
  - (c) Define sweep coagulation.
  - (d) Write types of pipes used for water supply. (4×3=12)