

C 17901

Name.....

Reg. No.....

**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION
JUNE 2011**

**CE 04 703—ENVIRONMENTAL ENGINEERING
(2004 Admissions)**

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

1. How do porosity and permeability affect the ground water storage ?
2. Briefly explain the term "evapotranspiration".
3. Explain any two water harvesting methods.
4. List out the essentials of water supply engineering.
5. What is meant by aeration and coagulation ?
6. Write short notes on hardness of water.
7. Explain about the cleaning and maintenance of distribution system.
8. With neat sketch, explain the pressure-relief valve.

(8 × 5 = 40 marks)

Part B

9. What is infiltration process ? Explain the measurement using in filtrometer.
Or
10. Explain the development and protection of ground water sources. (15 marks)
11. What is meant by pH value ? What is its importance in water analysis ?
Or
12. List out the water conservation techniques and explain any two of it. (15 marks)
13. Design a sedimentation tank of a water works to treat 12×10^6 litres of water per day. Assume the velocity of flow in the tank as 0.12 m/min and the detention period as 11 hours.
Or
14. Write short notes on :
 - (a) Aeration. (8 marks)
 - (b) Flocculation. (7 marks)
15. Give an account on Conduits .
Or
16. With suitable example, explain any one method of analysis of pipe networks. (15 marks)

[4 × 15 = 60 marks]