



(Pages . 2)

B – 5244

Reg. No. :

Name :



**Seventh Semester B.Tech. Degree Examination, February 2017
(2008 Scheme)**

08.704 : ENVIRONMENTAL ENGINEERING – I(C)

Time : 3 Hours

Max. Marks : 100

Instructions : Answer *all* questions. Assume suitable data *wherever* necessary.

PART – A

1. Discuss on various surface sources of water supply.
2. With a neat sketch explain canal intake structure.
3. Describe the BIS drinking water quality standards as per IS 10500 for any five parameters.
4. Derive Stokes law of settling.
5. Compare slow sand filter and rapid sand filters.
6. Briefly explain the types of chlorination.
7. Explain any two methods of distribution of water to a city.
8. Write short notes on adsorption. **(8×5=40 Marks)**

PART – B

Module – I

9. a) A city has the population data in the years 1951, 1971, 1991 as 50000, 110000 and 160000 respectively. Determine the expected population in 2011 by logistic method. **14**
- b) Discuss the factors affecting population growth. **6**

OR

10. Explain the physical, chemical and biological test done to determine the water quality. **20**

P.T.O.



Module – II

11. a) Design a rectangular sedimentation tank for the discharge of 12MLD. Assume suitable data. **14**
- b) Discuss on type 2 settling. **6**

OR

12. With a neat sketch explain the principal, construction detail and working of rapid sand filter. **20**

Module – III

13. a) Why disinfection is necessary? What are the various methods of disinfection (other than chlorination)? **12**
- b) Write short notes on defluoridation. **8**

OR

14. With a neat sketch explain the various pipe appurtenances used for water supply. **20**
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