

Reg. No. _____

Karunya University

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – May / June 2009

Subject Title: WATER SUPPLY ENGINEERING

Time : 3 hours

Subject Code: CE224

Maximum Marks: 100

Answer ALL questions

PART – A (10 x 1 = 10 MARKS)

1. Maximum daily demand = _____ x Average hourly demand.
2. For Indian conditions, the fire fighting demand is _____ lit/capita/day.
3. Surface sources of water are _____ and _____.
4. Name the method used to find the reservoir capacity for the water supply.
5. Name the formula used for the hydraulic design of pressure system.
6. What is a pump?
7. Most widely used coagulants for water and waste water are _____ and _____.
8. What is the detention time?
9. For domestic services, the supply pressure depends upon _____.
10. Name any two protective coatings for corrosion.

PART – B (5 x 3 = 15 MARKS)

11. What are the factors affecting the design period?
12. What do you mean by infiltration galleries?
13. What are the disadvantages of gravity system?
14. What are the different methods of disinfection?
15. What are the advantages of combined system?

PART – C (5 x 15 = 75 MARKS)

16. Explain the factors affecting per capita demand.
(OR)
17. Explain the different population forecasting methods.
18. Explain the different sources of water.
(OR)
19. Explain the development and maintenance of tube wells.
20. List the different types of piping materials. Explain any five with their merits and demerits.
(OR)
21. Explain the different types of joints used for connecting the pipes with neat sketches.
22. Explain the working of Slow sand filter with neat sketch.
(OR)
23. a. Write notes on Break point chlorination. (7)
b. Compare slow sand filter and rapid sand filter. (8)
24. Explain the different layout of distribution systems.
(OR)
25. Explain the different methods used for the analysis of distribution system.