

Reg. No. _____

Karunya University

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

End Semester Examination – November / December 2008

Subject Title: WATER SUPPLY ENGINEERING
Subject Code: CE224

Time : 3 hours
Maximum Marks: 60

Answer ALL questions

PART – A (10 x 1 = 10 MARKS)

1. High Concentration of Nitrates in drinking water can cause _____ among Children.
2. What is meant by per capita water demand?
3. What is an intake?
4. What is meant by specific yield?
5. Write the Hazen-William's formula for calculating mean velocity?
6. What is meant by Priming of a centrifugal pump?
7. What is the detention period employed for Plain Sedimentation?
8. What is the importance of break point chlorination?
9. Under what circumstances gravity system is adopted in water supply?
10. What are stand pipes?

PART – B (5 x 2 = 10 MARKS)

11. What is the minimum domestic water consumption for Indian towns?
12. What is an aquifer?
13. What is meant by service connection?
14. What is meant by flocculation?
15. What are the advantages of intermittent water supply?

PART – C (5 x 8 = 40 MARKS)

16. List any 8 Water quality Standards for drinking water?
(OR)
17. A city has the following recorded population
Year : 1951 1971 1991
Population: 50,000 1,10,000 1,60,000
Estimate (a) Saturation population (b) Expected population in 2011 by logistic curve method.
18. Explain the working of a Canal intake?
(OR)
19. Explain the working of an Infiltration Gallery?
20. What are the factors affecting the selection of water supply pump?
(OR)
21. Explain the tests used to detect leakage in pipes?
22. Explain the following design parameters with regard to plain sedimentation tanks
(a) Detention time (b) Surface overflow rate (c) flow through period (d) Settling velocity.
(OR)
23. Explain the operation of a Rapid sand filter?
24. What is service reservoir? What are the functions of a distribution reservoir?
(OR)
25. Explain the various methods of distribution system?