

Reg. No. _____

Karunya University

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

End Semester Examination – November / December 2008

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. What is the design period?
2. Write the broad classification of water analysis.
3. Write the different sources of water.
4. What are the different types of tube wells?
5. The sizes of the steel pipe are ranging from _____ to _____.
6. Name the formula used for the hydraulic design of pressure system.
7. What is the sedimentation?
8. Micro organism and colloidal matters are removed by _____ process.
9. Dissolved oxygen and carbon dioxide are removed by _____ process.
10. Name any two materials used for lining of pipes.

PART – B (5 x 3 = 15 MARKS)

11. What are the types of demands to be considered for a water supply scheme?
12. What do you mean by infiltration galleries?
13. What are the drawbacks of gravity system?
14. What are the disadvantages of mechanical flocculators?
15. What are the advantages of combined system?

PART – C (5 x 15 = 75 MARKS)

16. Explain the different types of physical and chemical tests carried out for water analysis.
(OR)
17. Explain the different population forecasting methods.
18. a. Explain the determination of reservoir capacity with the help of mass curve. (5)
b. Explain the different types of tube wells with neat sketches. (10)
(OR)
19. Explain the different sources of water.
20. List the different types of piping materials. Explain any five with their merits and demerits.
(OR)
21. Explain the different types of appurtenances of pipes with neat sketches.
22. Explain the working of rapid sand filter with neat sketch.
(OR)
23. Draw the layout of water treatment plant and explain its components.
24. a. Explain the different layout of distribution systems. (10)
b. What are the main functions of the storage and distribution reservoirs? (5)
(OR)
25. a. Explain the different methods used for the analysis of distribution system. (10)
b. Write the different corrosion control methods. (5)