Reg. No. _____

Karunya University

(Karunya Institute of Technology and Sciences)

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

End Semester Examination – April/May 2010

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 hourly demand = _____x Average hourly demand.
2. Presence of clay, algae and fungi in water are _____type of impurities.
3. Lakes and ponds are _____sources of water.
4. Name the different yield tests conducted for a tube well.
5. Name any two pipe materials used for pipelines.
6. When the pipes are laid above ground level, the pipes are laid with masonry support at _____ to _____intervals.
7. Bacteriological impurities causes diseases like _____and _____
8. Separation of suspended particles by gravitational settling is known as _____
9. Dual system is the combination of _____ and _____system.
10. What are the types of service reservoirs?

PART – B (5 x 3 = 15 MARKS)

11. What are the factors affecting the design period?
12. What are the different components of water intake?
13. What are the drawbacks of gravity system?
14. What do you mean by the term 'coagulation'?
15. What are the different types of distribution system?

PART – C (5 x 15 = 75 MARKS)

16. Explain the factors affecting per capita demand.

(OR)

17. Briefly explain the different types of physical and chemical tests carried out for water analysis.

18. Explain the different methods of estimating reservoir capacity.

(OR)

19. Write notes on (a) Infiltration Galleries, (b) Development of tube wells.

20. List the different types of piping materials. Explain any five with their merits and demerits.

(OR)

21. What are the necessities of pump usages? What are the factors involved in the selection of pumps?

22. Explain the working of slow sand filter with neat sketch.

(OR)

23. Draw the layout of water treatment plant and explain its components.

24. Explain the different layout of distribution systems.

(OR)

25. Write notes on corrosion and its control methods.