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Question Paper Code: 35015

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Fifth Semester

Civil Engineering

01UCE505 – WATER SUPPLY ENGINEERING

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. List the various types of water demand.
2. List the any four objectives of water supply schemes.
3. What are the factors involved in the selection of pipe materials?
4. List the criteria for selection of pumps.
5. How will you remove the iron and manganese from the water?
6. What is a Chloramine?
7. Define adsorption.
8. Differentiate desalination and demineralization.
9. Mention the appurtenances used in distribution system.
10. Name the various methods of distribution systems.

PART - B (5 x 16 = 80 Marks)

11. (a) What are the factors to be considered while planning a public water supply scheme in India. (16)

Or

(b) Explain in detail the consumption of water usage. (16)

12. (a) Explain the different types of Intake structures. (16)

Or

(b) (i) Discuss the steps involved in laying of water supply pipes. (8)

(ii) Discuss the factors involved in the selection of pumps for water supply schemes. (8)

13. (a) Interpret the various disinfection processes in detail.. (16)

Or

(b) (i) Explain the causes and control measures for pipe corrosion. (8)

(ii) Discuss the principle and methods of disinfection. (8)

14. (a) Summarize the adsorption process in short. (16)

Or

(b) Brief about the membrane filtration techniques. (16)

15. (a) Describe the various methods of installation of water mains. (16)

Or

(b) (i) Explain the analysis of distribution network using Hardy Cross method. (8)

(ii) Explain the components of house service connection with a neat sketch. (8)