

1051**Code : 15CE32T***Register
Number*

--	--	--	--	--	--	--

III Semester Diploma Examination, Nov./Dec. 2017**WATER SUPPLY ENGINEERING****Time : 3 Hours]****[Max. Marks : 100**

- Note :** (i) Answer any **six** questions from Part – A. Each question carries **5** marks.
(ii) Answer any **seven** questions from Part – B. Each question carries **10** marks.

PART – A

1. State the factors affecting per capita demand. **5**
2. Summarise the merits and demerits of cast iron pipes. **5**
3. List any five requirements of potable water. **5**
4. Explain briefly about total solids in water. **5**
5. Distinguish intermittent system with continuous system of water supply. **5**
6. Explain check valve with neat sketch. **5**
7. Explain briefly about Reverse Osmosis treatment of potable water. **5**
8. Explain briefly the benefits of rain water harvesting. **5**
9. Summarise the difference between organic and inorganic pollutants in water. **5**

PART – B

10. Explain the factors to be considered for water supply scheme. 10
11. The following data have been observed from census department : 10

Sl. No.	Year	Population
1	1960	45,200
2	1970	56,300
3	1980	69,500
4	1990	74,500
5	2000	87,100
6	2010	98,200

Estimate the population for the year 2020 and 2030 by Arithmetical Increase method.

12. Explain with a neat sketch Reservoir Intake. 10
13. Explain briefly the advantages of using Alum as coagulant in sedimentation with coagulation. 10
14. Explain with neat sketch working of slow sand filter. 10
15. Explain with neat sketch working of flash mixer. 10
16. Explain with sketch Grid iron system layout in distribution system. 10
17. Distinguish between : 10
- (i) Ferrule and Goose neck
 - (ii) Stop cock and Bib cock
18. Explain briefly the method of disinfecting well water. 10
19. Explain the various preventive measures against water pollution. 10