M. Tech.-IV (Civil-Hydraulic Engineering) (CBCS – 2015 Course) : SUMMER - 2019

SUBJECT: SELF-STUDY PAPER-II b) URBAN WATER MANAGEMENT

Time: 11.00 AM TO 02.00 PM Day: Thursday Date: 13/06/2019 Max. Marks: 60 S-2019-3440 N.B.: All questions are COMPULSORY. 1) 2) Figures to the right indicate FULL marks. 3) Answer to both the sections should be written in SAME Answer book. **SECTION-I** What do you mean by 'Potable limits'? Explain with example and case study. **Q.1** (10)What are settling basins and its principle of settling? Explain in details. (10)**Q.2** What is demand of water for domestic and public purpose? Give details. (10)What are the main assumptions in designing the water distribution system? Explain. What are the different pipes of different metals? Explain one of pipes in detail. Q.3 (10)OR What should be the characteristics of good water meter? What are the merits (10) and demerits of metering **SECTION-II** Under what circumstances, pumps are required? What are the main (10) Q.4 classifications of pumps? OR What are the various factors which affect the selection of type of pump and (10) prime movers? What are the various classifications of Wells? Describe a dug-well with the (10) **Q.5** help of neat sketch. OR What do you Understand by 'Inverted cone of depression' in the well? Sketch (10) and explain the geological condition which gives rise to an artesian well. **Q.6** What are the different methods of Boring? Explain one of methods with neat (10) sketch. What are strainer type tube-wells? Explain the principle of strainer. (10)