# SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA

#### SEMESTER END EXAMINATIONS (REGULAR), MAY-2016

## **B.Planning- II YEAR IV SEMESTER**

### **UTILITIES & NETWORK PLANNING (10210405)**

#### Maximum Marks - 50

Time - 2.00 Hours

- a) Answer any Two questions out of 1to 4 questions.
- b) Question No.5 is compulsory and answer any four out of six subquestions.
- Q1. Explain the role of SLBs in improving the performance of (15M) ULBs and discuss the indicators of wastewater SLBs along with definitions and formulas?
- Q2. How the infrastructure services and capacities change with (15M) reference to the concepts of age friendly city, compact city, green city and livable city? Establish the importance of land carrying capacity while planning for infrastructure?
- Q3. What are the characteristics of well performing public utilities (15M) in India and explain the important parameters that encourage PPP in infrastructure services?
- Q4. Explain the importance of capital and operation and (15M) maintenance costs of urban infrastructure services? List down the important aspects of fixing user charges or taxes for infrastructure services?
- Q5. Answer any four of the following:

 $(4 \times 5=20M)$ 

- 1) Explain the types of water distribution layouts and highlight the important design and socio economic considerations for layout planning?
- 2) What population projection methods used for calculating future water demand?
- 3) Explain the relationship between change in socio-economic & land use changes and infrastructure demands?
- 4) What are the roles and responsibilities of urban local bodies, development authorities and other governments in enabling infrastructure services?
- 5) Explain the importance of Rainwater harvesting and methods?
- 6) Explain DEWATS?