

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**End Semester Examination, December 2017**

Program	: B. Plan	Semester	: V
Subject (Course)	: Planning & Management of Utilities & Services	Max. Marks	: 100
Course Code	: BPLC 331	Duration	: 3 Hrs
No. of page/s	: 2		

All questions are compulsory.

Section A

(Each question carry 4.0 marks)

- Q.1.** Write short notes on:
- NUSP
 - DEWATS
 - Pyrolysis
 - Low cost appropriate Technology for Sanitation
 - Significance of Rain Water Harvesting

Section B

(Each question carry 10 marks)

- Q.2.** What do you understand by 'sanitary land filling'? Draw a neat sketch and explain the construction details practiced for sanitary land filling.
- Q.3.** Discuss the Sewer Treatment Process for Small & medium Sized Cities with the help of Flow diagram.
- Q.4.** Estimate roughly the sizes of supply conduits leading to adequate service reservoir serving a relatively small town of 25,000 population.
- Q.5.** Enumerate and discuss briefly the various methods, which are adopted collectively for treating public water supplies from a perennial river.

Section C

(Each question carry 20 marks)

- Q.6.** What are the requirements of a Good Distribution System? Elaborate upon the various type of Layouts of Distribution Networks & briefly discuss their advantages & disadvantages.

Q.7. Write detailed note on the ‘Design of Storm Water Drains’.

