Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

# **End Semester Examination, December 2019**

**Programme Name: B. Plan** Semester : V

: Sustainable Urban Development Time **Course Name** : 03 hrs Max. Marks: 100

**Course Code** : SPCC 3005

Nos. of page(s) : 01

Instructions: Attempt all questions, any one in Q9 (section B) and in Q11 (section C).

#### SECTION A

Q 1 D	Define food-web.	4	CO1
Q 2 V	What is sustainable development as per Brundtland report?	4	CO2
Q 3 V	What quotation was introduced during Agenda 21?	4	CO1
Q 4 B	Briefly explain water recycle and harvest.	4	CO3
Q 5 W	What is the contribution of A. Doxiadis?	4	CO5

#### **SECTION B**

Q 6	Write a short note on urban industrial mechanism for sustainable development.	10	CO4
Q 7	Discuss on standards on urban air quality and SWM.	10	CO3
Q 8	Explain best practices of any infrastructure for sustainable urban development.	10	CO1
Q 9	a. Differentiate Rural sustainability from Urban?		
	OR	10	CO2
	b. How is innovation and research linked to sustainable urban development?		

### SECTION-C

Q 10	Explain effects of human activity on different energy cycle?	20	CO4
Q 11	a. Write short note on urban interference on hydrological cycle.  OR	20	CO5
	b. With a suitable example, briefly elaborate on ecological footprint.		