Name:

**Enrolment No:** 



Semester: IV

## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, May 2018** 

Course: Ecology, Environment and Resource Management

Program: B. Plan

Time: 03 hrs. Max. Marks: 100

**Instructions: All questions are compulsory** 

## SECTION A (05x04=20marks) Compulsory

|        | Compulsory   | 1     |                             |
|--------|--|-------|-----------------------------|
| S. No. | Fill in the blanks   | Marks | CO                          |
| Q 1    | <ul> <li>a) A group of organism of the same species which live in the same habitat at the same time where they can freely interbreed is known as</li></ul> | 4x1=4 | CO1,<br>CO1,<br>CO6,<br>CO4 |
| Q2     | Briefly discuss the objectives of EIA.   | 4     | CO5                         |
| Q3     | Define the term solar panel and wind farm.   | 4     | CO3                         |
| Q4     | Name any five organization (national/ international) involved in creating environmental awareness.   | 4     | CO6                         |
| Q5     | Write a short note on grazing food chain and detritus food chain.  | 4     | CO1                         |
|        | SECTION B (04x10=40 marks)   | 1     |                             |
|        | Attempt all Questions  |       |                             |
| Q6     | Explain the rotating biological contractor and activated sludge process of wastewater treatment.   | 10    | CO2                         |
| Q7     | Explain overlays and network method used in EIA.   | 10    | CO5                         |
| Q8     | Define the term sustainable development. Briefly discuss the characteristics of sustainability   | 10    | CO3                         |
| Q9 (a) | Briefly discuss the steps used to calculate ecological footprints.  Or   | 10    | CO4                         |
| Q9 (b) | Briefly discuss the Lincoln index used for estimating the number of animals.   | 10    | CO4                         |
|        | SECTION ( (02-20, 40)  |       |                             |

## SECTION-C (02x20=40 marks)

Note: This section is divided into 2 sections C-1 and C-2. Question no 10 is compulsory however choice is given in section C2. Students are required to attempt any one question from C2 i.e. Question 11 (a) or Question

| 11(b)      |  |    |     |  |  |
|------------|--|----|-----|--|--|
| Section C1 |  |    |     |  |  |
| Q 10       | Discuss the steps followed while conducting the EIA of any developmental projects.   | 20 | CO5 |  |  |
|            | Section C2   | 20 | COC |  |  |
| Q11(a)     | Illustrate the salient features of The Environment (Protection) Act, 1986.           | 20 | CO6 |  |  |
| Q11(b)     | OR   |    | CO6 |  |  |
|            | Discuss the salient features of The Water (Prevention and Control of Pollution) Act, | 20 |     |  |  |
|            | 1974.  |    |     |  |  |