

National Institute of Technology, Delhi

**B.Tech, Mid Semester Exam
(First Semester, September 2017)**

Title of the Course: Environmental Studies

Course Code: MEL 101

Time: 2 Hours

Maximum Marks: 25

SECTION –A

1. Attempt all parts of this question. Each part carries equal marks. (1x8=8)

- a. How simpler inorganic substances are released into the soil?
- b. Define Invasion, Mesarch, Pioneer species and Pasmmosere.
- c. Why flow of material is cyclic and energy is non cyclic in Ecosystem?
- d. Differentiate between Photosynthesis and Respiration.
- e. Differentiate between Adjustment and Modification.
- f. Define Bioaccumulation and Biological magnification
- a. Define Food chain and Food webs.
- g. Explain Gross primary production (GPP), Net primary production (NPP) and Secondary production

SECTION—B

Attempt any three questions. Each question carries 4 marks. (4x3=12)

2. Define Ecological Pyramids. Explain the various types of ecological pyramids with examples
3. Why fixation of nitrogen is necessary? With the help of neat sketch discuss nitrogen cycle in detail.
4. Define ecosystem? Explain the structure and function of ecosystem.
5. What is biodiversity? Explain the values and conservational strategies of biodiversity.

SECTION –C

Attempt any one part of this section. Each question carries 5 marks. (5x1=5)

6. Discuss Man and Biosphere Programme (MAB) in detail.
7. What is ecological succession? Explain in detail the steps involved in ecological succession.