National Institute of Technology, Delhi

B.Tech, Mid Semester Exam (First Semester, September 2016)

Course Code: MEL 101 Title of the Course: Environmental Studies

Maximum Marks: 25 Time: 2 Hours

SECTION -A

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

- a. How simpler inorganic substances are released into the soil?
- b. Define COD and BOD, also explain their significance.
- c. Define Invasion, Mesarch, Pioneer species and Pasmmosere.
- d. Write the names of the sequential steps found during ecological succession.
- e. What was Minamata Bay tragedy?
- f. Why is chlorination not the most desirable method of disinfecting polluted water?
- g. Differentiate between aerobic and anaerobic treatments.
- h. List the parameters indicating water pollution.

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. What is biodiversity? Explain its status on national level and conservational strategies.
- 5. Define ecosystem? Explain the structure and function of ecosystem.

SECTION -C

- (5x1=5)6. Attempt any one parts of this section. Each question carries 5 marks.
- a. What are the ecological and medicinal use values of biodiversity? Also, discuss in detail Man and Biosphere Programme (MAB).
- b. Differentiate between pollutant and contaminant. Explain in detail the sources of water pollution and design of wastewater treatment plants with the help suitable diagrams.