

**INDIAN MARITIME UNIVERSITY**  
**(A Central University, Govt. of India)**  
**End Semester Examinations December 2017**

**Programme:** B.Tech (Marine Engineering)

**Semester:** VI

**Subject Name:** Environmental Sc & Technology

**Subject Code:** UG11E2603/ UG11E1603

**Date:** 03.01.2018

**Max. Marks:** 100

**Time:-**3 Hrs

**Pass Marks:** 50

---

**PART – A (3x10= 30 Marks)**  
**(All Questions are Compulsory)**

1. a) What are all the Scope of Environmental Studies ?
- b) Explain food chain & food web.
- c) What is the relation between DO and BOD.?
- d) Differentiate cyanobacteria and chemosynthetic bacteria.
- e) What do you mean by the term hot spot in biodiversity?
- f) Describe the following:  
solid waste & e-waste
- g) Define autoecology & synecology.
- h) Write the name of three equipments that control air pollution in an industry.
- i) Explain the following: Ecotone and Edge effect
- j) Define global warming and acid rain.

**PART – B (5 x14 = 70 Marks)**  
**(Answer any five of the following)**

2. a) Explain physiochemical and biological factors in environment. (7)
- b) What is meant by ecological succession? Describe the process of ecological succession in a forest. (7)

3. What is meant by bio geochemical cycles and write a brief account on the carbon cycle and nitrogen cycles in the environment? (14)
4. a) Elucidate in detail about the classification and aloes of biodiversity.(7)  
b) Explain the In-Situ and Ex-Situ conservation along with their merits and limitations? (7)
5. Discuss the sources, effects and control measure of air pollution? (14)
6. a) What is sustainable development ?What are the critical objectives? (7)  
b) What are the steps of biomedical wastes handling and management?(7)
7. Write an account of the following: (5+4+5)  
a) Environment Impact Assessment  
b) Environment Management Plan  
c) Environment Audit Guidelines & Methodologies
8. Describe the following: (7+7=14)  
a) Macrophytes  
b) Phytoplanktons and zooplanktons

\*\*\*\*