

**EN-112 ENVIRONMENTAL SCIENCE**

*Time: 3 Hours*

*Maximum Marks : 70*

**Note :** Answer any **FIVE** questions.  
Assume suitable missing data, if any.

- 1[a] Explain nitrogen cycle with a special reference of microorganisms involved in it. 7
- [b] Discuss the composition and temperature profile in different layers of atmosphere. 7
- 2[a] What do you mean by energy flow in an ecosystem? Briefly describe different types of energy flow models. 7
- [b] Define ecosystem. What are the salient features of different forest ecosystems? Explain. 7
- 3[a] What do you mean by water quality? Briefly mention the physico-bio-chemical characteristics of water used to establish water quality. 7
- [b] Define water pollution with special reference to organic matter and dissolved oxygen content. 7
- 4[a] Enumerate the harmful effects of air pollution on the environment. 7
- [b] What do you mean by ozone hole? How does it form and what are its environmental implications? Explain. 7
- 5[a] What are the advantages of non-conventional energy sources over the conventional sources? 7
- [b] What do you mean by Biogas generation? What are the factors responsible for good biogas production? Explain. 7
- 6[a] What is global warming? How is it different from green house effect? 7
- What are the environmental outcomes of global warming?

- [b] What is acid rain? How does it form and what are the harmful effects of acid rain? 7
- 7[a] Define 'Noise'. Classify the different sources of noise and its control methods. 7
- [b] Briefly discuss the methodology followed for municipal solid waste management. 7
- 8 Write short note on:
- [a] Water borne diseases. 4
- [b] Ecosystem production. 5
- [c] El-Nino. 5