



Environmental Studies

December 16

First Year (Semester 1)

Total marks: 60

Total time: 2 Hours

INSTRUCTIONS

(1) Question 1 is compulsory.

(2) Attempt any **three** from the remaining questions.

(3) Draw neat diagrams wherever necessary.

1. Attempt any five from following .- 15
 - a) What is sustainable development? Why there is a need for sustainable development?
 - b) Differentiate between Renewable and Non Renewable sources of energy.
 - c) What are the causes and effects of E-pollution?
 - d) Write important functions of Central pollution Control Board (CPCB)
 - e) Explain concept of Carbon Credit
 - f) What is Nuclear pollution? What are its sources and effects?
 - g) What is Ecological Succession?

2.
 - a) Explain Social and Economic aspects of sustainable development. 5
 - b) Draw a neat labelled diagram of Electrostatic Precipitator and explain how it is useful to control gaseous particulate emissions? 5
 - c) What is Hydropower? draw suitable diagram and explain how hydropower is generated. 5

3.
 - a) What is solid waste? Explain solid waste management by incineration. 5
 - b) Write important functions and powers of State Pollution Control Board. 5
 - c) Write a case study on Cloudburst and Landslides at Kedarnath in June 13 5



- Q4 a) Explain global environmental crisis pertaining to population. 5
- b) Explain environmental consent and authorization mechanism. 5
- c) Draw a neat diagram of wind turbine and explain how it helps in energy production 5
- Q5. a) Explain how resource utilization as per carrying capacity is an important control measure for sustainable development. 5
- b) Write a case study on pollution of Ganga River. 5
- c) Draw a schematic and explain the principle and working of photovoltaic cells. 5
- Q6. a) Explain the causes and effects of depletion of natural water resources. 5
- b) Write a note on industrial waste water treatment. 5
- c) What is Disaster Management? Explain how techniques of disaster management are implemented in the event of an earthquake. 5