



Q.P. Code : 803601

(2 Hours)

[ Total Marks : 60

- N.B. :** (1) Question No.1 is **compulsory**.  
(2) **Attempt** any **three** question from **Q.2** to **Q.6**.  
(3) Draw **neat labelled** diagram wherever **applicable**.  
(4) Figure to **right** indicate **full** marks.

1. Attempt **any five** from following :- 15
- What is sustainable development? Why there is need for sustainable development?
  - Differentiate between : Renewable and Non-renewable sources of energy.
  - What are the causes and effects of E-pollution ?
  - Write important functions of Central Pollution Control Board (CPCB).
  - Explain concept of Carbon Credit.
  - What is Nuclear pollution? What are its sources and effects?
  - What is Ecological Sucession?
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 a 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 2013. 5
4. 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

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5. 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 principle and working of photovoltaic cells. 5
6. 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 earthquake. 5