

M.Sc. (Part-II) (Environmental Science) (CBCS Pattern) Semester - IV  
**PSCENVT16.2-B - Foundation Course : Green Technologies**

P. Pages : 1

Time : Three Hours



**GUG/S/23/11384**

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate the answers with suitable diagrams and examples.

1. Discuss green economy and green chemistry. **16**
- OR**
- a) Shed light on successful green technologies. **8**
- b) Discuss paradigm shift from 'cradle to cradle' to 'cradle to grave'. **8**
2. Discuss green buildings with following points: **16**
- i) Construction;
- ii) Cost and benefits;
- OR**
- a) Discuss about UNEP's green economy initiative. **8**
- b) Highlight the role of government bodies in green planning.
3. Describe various methods for carbon capture and storage technologies. **16**
- OR**
- a) Explain construction and working of flue gas desulfurization unit. **8**
- b) Describe the methods to increase energy efficiency. **8**
4. What is green nanotechnology? Discuss principles and recognition of green criteria in environmental science. **16**
- OR**
- a) Describe biodegradable and bio-accumulative products in environment. **8**
- b) What are photodegradable plastic bags? **8**
5. a) Give an account on 3 R's of green technology. **4x4**  
**=16**
- b) Explain the concept of green cities.
- c) Discuss in brief dioxin reduction and removal methods.
- d) Explain green alternatives to chemical reagents.

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