[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5622

J

Unique Paper Code

2183012005

Name of the Paper

Energy and Environment

Name of the Course

B.Sc. (H) Environmental Sciences – (DSE-14)

Semester

VI

Duration: 2 Hours

Maximum Marks: 60

Instructions for Candidates

- 1. Write your Roll No. on the top immediately on receipt of this question paper.
- 2. Answer any four questions out of the six provided.
- 3. All Questions carry equal marks.
- 1. Explain the ecological footprint of energy use and its connection to climate change and global warming. (15)
- 2. Describe India's efforts to build a self-reliant clean energy future. Include policy examples. (15)
- 3. (a) Compare solar and geothermal energy in terms of source, working, and environmental impact.
 - (b) Describe energy storage technologies and their role in smart city energy systems. (15)
- 4. (a) What is carbon pricing? How does emissions trading help reduce climate impact? (8)
 - (b) Explain public perception and challenges of nuclear energy adoption. (7)

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5. Write short notes on the following:

 $(3\frac{1}{2}\times 4=15)$

- (i) Wind turbines
- (ii) Energy-efficient appliances
- (iii) Energy from waste
- (iv) Environmental impact assessment (EIA)
- 6. Write explanatory notes on the following:

 $(5 \times 3 = 15)$

- (i) Role of subsidies in renewable energy
- (ii) Fusion energy potential
- (iii) Carbon capture and storage (CCS)

