

[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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2

5. Write short notes on the following :

(3½×4=15)

- (i) Wind turbines
- (ii) Energy-efficient appliances
- (iii) Energy from waste
- (iv) Environmental impact assessment (EIA)

6. Write explanatory notes on the following :

(5×3=15)

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