

## S.C.No.—301100-II

Open Elective EXAMINATION, 2024

(Batch 2023) (Main)

(Second Semester)

ENVIRONMENT AND ENERGY  
MANAGEMENT

18-EEM-100

Time : 3 Hours

Maximum Marks : 80

**Note :** Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

1. Short answer type questions : 2×8=16

- (a) Ozone depletion.
- (b) Vermicomposting.
- (c) Bioplastics.

- (d) What are the basic principles of solar energy ?
- (e) Acid rain.
- (f) What are the disadvantages of using non-renewable energy sources ?
- (g) List down the practical applications of tidal energy.
- (h) What are the pros and cons of using wind energy ?

2. Write a detailed note on chemical and biological methods for measurement of pollution. Also, what are the advantages of each approach in environmental monitoring ?

16

3. What are the primary sources of noise pollution in urban areas ? What measures can be implemented to mitigate its impact on public health and the environment ?

16

4. Define environmental management and outline its scope. Additionally, discuss some of the limitations or challenges faced in implementing effective environmental management practices.

16

5. Write detailed notes on the following :

(a) Bioremediation. 8

(b) Biogas production. 8

6. Differentiate between renewable and non-renewable energy sources. Discuss the environmental impacts associated with each type. Provide examples of both renewable and non-renewable energy sources. 16

7. How do different generations of solar energy technology impact its applications ? Elaborate.

16

8. What are the basic principles of geothermal energy ? Also, highlight its common applications ? 16

9. What benefits and challenges are associated with using tidal energy ? 16