(a) What is the significance of energy efficiency? How does it relate to energy conservation? Discuss

(10)

(5)

with examples.

Discuss the politics of energy policy in the Indian context. Critically analyze its impact on bilateral ties with neighboring countries. (15)

(b) What is geothermal energy?

Evaluate the potential and challenges of alternative energy sources in shaping our energy future. (15)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper: 4442

G

Unique Paper Code

: 32187501

Name of the Paper

: Energy & Environment

Name of the Course

: B.Sc. (H) Environmental

Sciences-DSE

Semester

: V

Duration: 3 Hours

Maximum Marks: 75

Instructions for Candidates

- Write your Roll No. on the top immediately on receipt of this question paper.
- Attempt any five questions.
- All questions carry equal marks.
- (a) Write the definition of the following (Any five): $(2 \times 5 = 10)$
 - (i) Energy conservation
 - (ii) Global warming

- (iii) Biofuels
- (iv) Urban heat island effect
- (v) Greenhouse effect
- (vi) Energy diplomacy
- (b) Fill in the blanks:

 $(1 \times 5 = 5)$

- (i) The advent of _____ marked a significant shift in energy use in urban settings.
- (ii) _____ energy resources are those that can be replenished over a short period.
- (iii) The ______ sector is one of the major consumers of energy globally.
- (iv) _____ is a significant issue arising from nuclear energy use.
- (v) Energy policies are influenced by both _____ and international political factors.
- 2. Write short notes on the following: $(5\times3=15)$
 - (i) The role of energy in urban and rural setups.

- (ii) Environmental impacts of fossil fuel burning.
- (iii) Energy production and ecology.
- 3. Write down the difference between the following: $(5\times3=15)$
 - (i) Renewable and non-renewable energy resources
 - (ii) Energy use in the industrial and agriculture sectors
 - (iii) Energy policies in developed and developing countries
- 4. Analyze the impact of energy over-consumption in urban settings. Discuss its environmental, economic, and social implications. (15)
- 5. (a) What are biofuels? Why are they considered green energy? How do they contribute to energy sustainability? (8)
 - (b) Discuss the evolution of energy use over time with relevant examples. (7)