

- (c) Name one source of renewable energy. Why should we use renewable energy? (5,5,5)
8. (a) What are the environmental impacts of tidal energy?
- (b) Explain the difference between nuclear fission and nuclear fusion.
- (c) What is a fuel cell, and how does it convert chemical energy into electrical energy? (5,5,5)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 4658

J

Unique Paper Code : 2174001211

Name of the Paper : GE: ENERGY AND THE ENVIRONMENT

Name of the Course : All Undergraduate Courses except with Chemistry

Semester : II/IV/VI

Duration : 3 Hours

Maximum Marks : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
 2. Attempt **Six** questions.
 3. **All** questions carry equal marks.
-
1. (a) Compare coal, oil, and natural gas in terms of environmental impact and efficiency.
 - (b) What is nuclear energy and how is it generated?

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- (c) Explain how energy consumption affects climate change. (5,5,5)

2. Write short note on the following :

(a) Carbon Footprint

(b) Green House gases

(c) Zero Carbon or low carbon energy (5,5,5)

3. (a) Explain the impact of fossil fuel combustion on global warming.

(b) How does geothermal energy work, and what are its benefits and limitations?

(c) What are the advantages and disadvantages of solar energy? (5,5,5)

4. (a) How does energy production contribute to air pollution?

(b) Describe the role of international agreements like the Paris Agreement in energy sustainability.

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- (c) What are the different types of renewable energy? (5,5,5)

5. (a) Describe the process of biomass energy conversion.

(b) How does the burning of fossil fuels contribute to global warming?

(c) What are the effects of climate change on biodiversity? (5,5,5)

6. (a) What are the primary and secondary air pollutants? Gives examples.

(b) Discuss how air pollution in urban areas affects the environment and human health.

(c) Why are biofuels considered better for the environment than fossil fuels? (5,5,5)

7. (a) What is the main goal of carbon capture?

(b) Why is waste-to-energy important for the environment? Name two methods used in WTE.

P.T.O.