

2021

ENVIRONMENTAL SCIENCE

[HONOURS]

Paper : VII

Full Marks : 75

Time : 4 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **five** of the following: $2 \times 5 = 10$
- What is meant by environmentalism?
 - Define sustainable development.
 - Define shifting cultivation.
 - Define the term carrying capacity.
 - State basic principle of Darcy's law.
 - What is geothermal energy?
 - Write the full form of OTEC and OPEC.
 - What is willingness to pay?

2. Answer any **three** of the following questions:

 $5 \times 3 = 15$

- Elucidate the relationship between economics and environmental economics. 5
- Write a short note on Zonal Travel Cost Model.
- What is meant by agro forestry? Discuss briefly regarding the various types of forest resources in India. $1+4$
- Provide an overview on non-renewable sources of energy.
- What is meant by alternative energy source? State the different types of alternative sources of energy. $1+4$

3. Answer any **five** of the following questions:

 $10 \times 5 = 50$

- What is monopoly market? Critically discuss the market equilibrium in the context of environmental economics. $2+8$
- Distinguish between resource and wealth. Discuss the impact of over expression of agriculture on environment. $2+8$

[Turn over]

- iii) Define wealth. Classify the major natural resources. 2+8
 - iv) What is meant by marginal benefit? Provide an overview on direct and indirect valuation of environment. 2+8
 - v) What are the factors responsible for energy crisis in India? Provide an overview on energy use pattern in India. 2+8
 - vi) What is biodiesel? Discuss briefly on the present scenario of renewable energy use pattern in India. 2+8
 - vii) What is pareto efficiency? Discuss the tragedy of common. Suggest some options to avoid this situation. 2+4+4
 - viii) What is Kuznets ratio? Briefly explain the application of Kuznets curve in environmental studies. 3+7
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