

U.G. 5th Semester Examination-2020**ENVIRONMENTAL SCIENCE****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : ENVS-H-DSE-L-01A****(Energy and Environment)**

Full Marks : 40

Time : 2½ 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 are the benefits of using geothermal energy?
 - Briefly explain the need of energy efficiency.
 - What are the environmental impacts associated with construction of dams?
 - Give the strategic classification of earth's energy resources.
 - What is spent fuel?
 - State the importance of greenhouse effect in maintaining the earth's surface temperature.
 - What do you mean by wind energy converters?
 - Give two examples of biofuel.

2. Write short notes on any **two** of the following:

 $5 \times 2 = 10$

- Fossil fuel burning and air pollution.
- Urban heat island - mechanism and effect.
- Biomass as source of energy : Merits and demerits.
- Photovoltaic cell and its application.

3. Answer any **two** of the following: $10 \times 2 = 20$

- Compare and contrast the historical and current perspectives of global energy demand. Categorize the energy subsidies in India and state their inter-linked environmental cost.

 $4 + 6 = 10$

- Sketch and explain the natural energy system of earth. Compare the energy-use scenarios in rural and urban setups. Suggest some ways of energy conservation in our day-to-day life.

 $4 + 4 + 2 = 10$

- Discuss the causes and effects of Chernobyl nuclear accident. State the advantages and disadvantages of nuclear power plants.

 $6 + 4 = 10$

- Write short notes on the following:

- Sustainable Development Goals with respect to energy management.
- Prospects and challenges of wind energy in India.

 $5 + 5 = 10$