No. of Printed Pages: 3 MED-003/MED-009

## POST GRADUATE DIPLOMA IN ENVIRONMENT AND SUSTAINABLE DEVELOPMENT (PGDESD)

## **Term-End Examination**

June, 2020

MED-003/MED-009: ENERGY AND ENVIRONMENT

Time: 2 Hours Maximum Marks: 50

Note: Question No. 1 is compulsory. Attempt any three questions from Question No. 2 to 5.

Support your answer with suitable examples wherever necessary.

## 1. Attempt all parts:

5 each

- (a) Discuss the demand of energy due to industrialisation.
- (b) Explain the role of chemical energy in fossil fuels.
- (c) Discuss the role of nuclear power plant in generation of energy in large quantities.

- (d) Explain the use of energy storage technologies particularly in hydrogen as fuel cells.
- (a) Discuss the infrastructure efficiency strategies with regard to power and water supply and use of waste water and recycling facilities.
  - (b) Explain the concept of multi-use building and waste heat utilisation.
- (a) Describe the role of non-hydro renewable energy sources in meeting the energy needs.
  - (b) What are key concerns for a sustainable energy policy in India?
- Explain the environmental economics, essentially in the creation of present generation of economists.

## Or

Discuss the impacts of energy in relation to sustainability in terms of economic growth.

5. Write short notes on any two of the following:

5 each

- (a) Solar thermal power generation
- (b) Biomass technologies
- (c) Advantages and limitations of small hydropower
- (d) Carbon sequestration