

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

Term-End Examination

00958

June, 2015

MED-003/MED-009 : ENERGY AND ENVIRONMENT

Time : 2 hours

Maximum Marks : 50

Note : *Question no. 1 is compulsory. Attempt any three questions from the remaining questions no. 2 to 5. Support your answers with suitable evidence wherever needed.*

1. Attempt any **four** from the following questions :

- (a) Explain the factors which you consider will lead to increased global demand of electricity over the next 50 years. 5
- (b) Discuss the economics of supply of energy. 5
- (c) How is energy produced in a Nuclear Power Plant ? Draw a schematic diagram of the cross-section of a Nuclear Power Plant. 2+3=5

(d) Highlight the measures that can be used to save energy in residential and commercial sectors in India. $2\frac{1}{2}+2\frac{1}{2}=5$

(e) What is Demand-Side Management ? How is it achieved ? State its benefits. $2+1+2=5$

2. You are asked to set up an energy generation plant. What important considerations will you keep in mind to ensure environment-friendly infrastructure ? 10
3. List the measures for energy sustainability. Explain how waste can be used as an energy resource. 5+5=10
4. Describe any *two* of the following : 5+5=10
- (a) Solar Water Heating System utilization in India
 - (b) Rebound Effect
 - (c) Energy policies in SAARC Regions
5. Discuss the broad goals for attaining energy sustainability as defined by World Energy Council. 10
6. Trace energy scenarios between energy production and consumption patterns in developed and developing countries. 10