

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

Term-End Examination

December, 2015

00974

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. Support your answers with suitable evidence wherever necessary.*

1. Attempt any **four** of the following :

(a) Prepare a list of products that are extracted from crude oil. Explain the process of oil refining. 3+2=5

(b) Evaluate the impact of hydropower and wind energy technologies on the environment. $2\frac{1}{2}+2\frac{1}{2}=5$

(c) Highlight the aims and benefits of energy planning. 5

- (d) Explain “No regrets” policy for reducing costs of CO₂ emission in the context of economics and climate change. 5
- (e) Describe the working of a Biogas plant. 5
2. What do you understand by Solar Photovoltaic Technologies (SPV) ? Name the various SPV applications. Write an account of SPV utilisation in India. 10
3. Elaborate the objectives of a sustainable energy policy. What are the challenges which developing countries of South Asia are facing ? 10
4. Write short notes on any **two** of the following : 5+5=10
- (i) Supply-side approach to energy problem
 - (ii) Carrying capacity of the Earth’s energy base
 - (iii) Energy subsidies and energy securities in the North-South debate
5. Suppose you are living in an energy poor area. Describe the key challenges which you are likely to face in removing this poverty. 10
6. Discuss in detail the important features of land use and transportation in urban energy planning. 10