

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

**Term-End Examination
June, 2013**

**MED-003/MED-009 : ENERGY AND
ENVIRONMENT**

Time : 2 hours

Maximum Marks : 50

Note : Question 1. is compulsory. Attempt "any three" questions from the remaining. Support your answer with suitable evidence wherever needed.

Attempt **any four** from the following :

1. (a) Write four key goals of sustainable policy.
Explain any one in detail. 5(2+3)
- (b) Write any four energy options available to developing countries based on energy resource base of the earth. Explain any one in detail. 5(2+3)
- (c) What are three major challenges before energy planner and policy maker of energy of poor country ? Explain any one in detail. 5(3 + 2)
- (d) What is wind electricity generator ? List any two advantages and limitations of wind energy. 5(1+2+2)

- (e) Explain how electricity is produced in nuclear based thermal power plant. Draw schematic diagram showing different system component. **5(2+3)**
2. (a) What is environmental economics ? Name two methods of indirect data collection. Describe any one in detail. **6(2+2+2)**
- (b) Explain two ways of improving energy efficiency through dematerialization. **4(2x2)**
3. (a) What is energy planning ? Write any three limitations being faced by developing countries in evolving sustainable energy planning. **5(2+3)**
- (b) Write six broad aims of macro - level energy planning. Describe benefits of energy planning. **5(3+2)**
4. (a) Name any four applications of solar thermal collectors. Explain any one using schematic diagram showing its different components. **5(2+3)**
- (b) What is capacity range of small hydro plant ? List two main advantages and disadvantages of hydro power plant. **5(1+2+2)**

5. (a) Describe positive and negative impacts of following renewable energy. $6[(1+1)\times 3]$
- (i) hydro energy
 - (ii) biomass energy
 - (iii) wind energy
- (b) Name any four components of climate change system. Describe any one in detail. $4(2+2)$
-