

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

**Term-End Examination
June, 2010**

**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 answer with suitable evidence wherever needed.

1. Attempt *any four* parts from the following :
 - (a) Draw a labelled diagram showing the structure and working of an oil well. List any four useful products extracted from crude oil. **3+2**
 - (b) State five key objectives of energy policy. **5**
 - (c) One of the broad goals for energy sustainability is "*acceptability in terms of social and environmental goals*". Explain the statement in italics in about **100** words giving a suitable example. **5**
 - (d) State five major environmental issues associated with the development of hydropower projects. **5**
 - (e) State the three main criteria for selecting a wind energy site. List two main applications of wind energy. **3+2**

2. (a) State three mechanisms specified in Kyoto Protocol for combating climate change. List six green house gases covered under it. 3+3
- (b) Describe any one way of reducing CO₂ emissions growth in about 100 words. 4
3. (a) What is cogeneration ? Describe any two ways in which energy can be produced based on the concept of co-generation. 2+4
- (b) Explain how energy scarcity affects the health of people living in rural areas of our country. Limit your answer to 100 words. 4
4. Explain the underlying principle of solar thermal technologies. Name four main types of solar collectors and describe one in about 100 words. List four uses of solar thermal technologies. 2+2+4+2
5. List four key sectors from the point of view of energy use in our national economy. Discuss energy saving measures in any one of these sectors in not more than 200 words. 2+8
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