



NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI - 620 015

**FIRST CYCLE TEST**

Subject Code : CC101  
Subject Name : ENERGY AND ENVIRONMENTAL ENGINEERING  
Class : B.Tech. I<sup>st</sup> SEMESTER

Date : 11.10.2013  
Time : 08.30 - 09.30 a.m.  
Max : 20 Marks

**ANSWER ALL THE QUESTIONS**

1. Distinguish between Conventional and Non-Conventional Energy Sources with examples. *4 points* 2 Marks
2. What do you understand by Sustainability? Why it is considered in Energy and Environment? 2 Marks
3. What are the causes for Global warming and explain the ways to prevent it. 3 Marks
4. Explain the measurement of Solar Radiation with sketches. 3 Marks
5. Explain the ways of harnessing Solar Energy? *(PV cells) (heating) (cooling)* 3 Marks
6. State various appliances working on Solar Energy and explain any two with neat sketches. *(solar cooker) (water heater)* 3 Marks
7. Present a SWOT Analysis of Thermal, Hydro, Nuclear and Solar Power Plants. 4 Marks