Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY M. E. - SEMESTER – I • EXAMINATION – WINTER • 2014

Subject code: 2713901 Date: 07-01-2015 Subject Name: Energy Resources, Economics and Environment Time: 02:30 pm - 05:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. **Q.1** Write a short note on Scope of development of renewable energy sources in 07 India. **(b)** Explain in detail Greenhouse Gases and its effect. **07** 0.2 Define the term energy security. Give your suggestions to achieve energy **07** security Define the environment attribute. Which type of information is required for **07** (b) describing Attributes? OR Explain carbon credits and emission trading with its advantages and limitations. 07 Q.3Explain in detail the points to be considered for site selection of thermal power 07 (a) plant. Write a short note on recent developments of Hydro Electricity power **07 (b)** generation in India. Also mention the advantages and limitation of Hydro Electricity power generation. OR Explain biomass power generation with its benefits and barriers. Q.3 **07** (a) Write a short note on tidal energy for power generation. **(b) 07 Q.4** (a) What makes EIA time consuming, expensive, and subjective Exercise? 07 Write a short note on combine cycle power plant 07 (b) **Q.4** Explain the salient features of energy conservation act 2001 in detail 07 (a) (b) Write a short note on Electricity act 2003 and its features. 07 07 **Q.5** Write a short note on Kyoto protocol and its Kyoto mechanisms. (a) Explain payback period method and return on Investment method for financial (b) 07 Analysis. OR Define sustainable development and how to achieve sustainable development in **Q.5** (a) 07 Enlist various natural cycles of environment and explain any one in detail along 07 (b) with neat sketch.

\*\*\*\*\*