Printed Pages—2   **EEE054**

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2901	Roll No.										

B.Tech.

(SEM. VIII) EVEN THEORY EXAMINATION 2012-13
ENERGY EFFICIENCY & CONSERVATION

Time : 3 Hours   *Total Marks : 100*

Note :– Attempt all questions.

1. Attempt any **two** of the following :   **(10×2=20)**

   (a) Differentiate between the load pattern of small scale and large scale industries. What measures are taken to conserve energy in a large scale industry ?

   (b) Enumerate several measures of conserving energy in a thermal generation plant. Discuss one of them in detail.

   (c) What do you know about legislation related to energy conservation in India ?

2. Attempt any **two** of the following :   **(15×2=30)**

   (a) Briefly describe the concept of Demand Side Management.

   (b) Name various strategies used for Demand Side Management and discuss any one of them in detail.

   (c) Write a brief note on the advance technologies available worldwide for demand side management. Can they be applied in India with special reference to their acceptance by consumers ?

EEE054/DPC-48171   *[Turn Over*

3.   Attempt any **two** of the following :   (10×2=20)

   (a)   Discuss about improvement of power factor.

   (b)   How is a capacitor bank designed in terms of units and
         ratings ?

   (c)   Discuss about the application of switched capacitors.

4.   Attempt any **three** of the following :   (10×3=30)

   (a)   How is the UPS selection for a particular use ?

   (b)   Discuss the special features of Indian Electricity Act.

   (c)   What do you understand by energy efficient motors ?

   (d)   How would you incorporate energy efficient features in
         lighting loads ?

   (e)   How is energy saved by load scheduling ?

   (f)   Discuss about the energy efficient way of controlling the
         speed of motor.