

M. Arch. Sem-I (Sustainable Architecture) (CBCS 2018 Course) :

WINTER - 2018

SUBJECT : ENERGY MANAGEMENT & AUDIT

Day : Saturday
Date : 24/11/2018

W-2018-3478

Time : 10.00 A.M. TO 12.00 NOON
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate **FULL** marks.
 - 3) Answer to both the sections should be written in **SEPARATE** answer book.
 - 4) Assume suitable data and draw figures if necessary.
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SECTION - I

- Q.1** Write short notes on **(ANY TWO)** **(10)**
- a) What is Renewable Energy and list at least five renewable energy sources.
 - b) Define 'Energy Management' and 'Energy Audit'.
 - c) What are the various grades of energy with examples?
- Q.2** Explain in brief / Describe the following terms in detail **(ANY TWO)** **(10)**
- a) Differentiate the terms 'Specific Heat' and 'Heat Capacity'.
 - b) Explain 'Law of conservation of Matter'.
 - c) What are the principles of Energy Management?
- Q.3** Answer the following **(ANY ONE)** **(10)**
- a) How do an Industry, nation and globe would benefit from energy efficiency programs?
 - b) Write down the steps involved in 'Energy Management Strategy'.

SECTION - II

- Q.4** Write short notes on **(ANY TWO)** **(10)**
- a) 'SANKEY diagram'
 - b) What do you understand about ESCOs?
 - c) Name at least five Ozone layer Depleting Substances (ODS).
- Q.5** Explain in brief / Describe the following terms in detail **(ANY TWO)** **(10)**
- a) Differentiate Exothermic and Endothermic reactions with suitable examples.
 - b) Define Sustainable development defined by Brundtland commission.
 - c) What are the limitations with Return on Investment technique?
- Q.6** Answer the following **(ANY ONE)** **(10)**
- a) Discuss the procedure followed during energy and mass balance calculation.
 - b) Explain with diagram 'What is CPM and list the steps in CPM project planning'.

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