

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

**SUBJECT: SUSTAINABLE MATERIALS & TECHNOLOGY**

Day: Wednesday  
Date: 28/11/2018

**W-2018-3480**

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

---

**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Both the sections should be written in **SEPARATE** answer books.
  - 3) Figures to the right indicate **FULL** marks.
  - 4) Assume suitable data and draw figures if necessary.
- 

**SECTION - I**

- Q.1** Write short notes on any **TWO** of the following: **(10)**
- a) Impacts of building materials and define sustainable building material.
  - b) Dry wall construction.
  - c) Types of insulating materials.
- Q.2** Explain in brief/describe the following terms in detail (**Any TWO**) **(10)**
- a) Advantages of Ferro cement over traditional material.
  - b) Causes of failure of abode structure.
  - c) Use of plastic in building construction.
- Q.3** Answer the following (**Any ONE**) **(10)**
- a) Construction technology for green roof.
  - b) Explain one walling section for cooling and one for heating strategy.

**SECTION - II**

- Q.4** Write short notes on any **TWO** of the following: **(10)**
- a) Explain LCA of Coir boards.
  - b) What are phase change materials?
  - c) Mycelium as a contemporary material.
- Q.5** Explain in brief/describe the following terms in detail (**Any TWO**) **(10)**
- a) What are CSEB, State its uses.
  - b) What is embodied energy of a material?
  - c) Danpalon sheets.
- Q.6** Answer the following (**Any ONE**) **(10)**
- a) Identify five different traditional construction materials and explain one in detail with sketches.
  - b) Rammed earth construction in detail with sketches.

\* \* \*