

M.ARCH. (SUSTAINABLE ARCHITECTURE) SEM.-I (CBCS-2018 COURSE) : Winter-2021
SUBJECT : SUSTAINABLE MATERIALS AND TECHNOLOGY

Day : Wednesday
Date : 05-01-2022

Time : 10:00AM-TO 12:30 P.M.
Max. Marks : 60

W-2021-19773

N.B.

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

SECTION – I

- Q.1** Write short notes on : (**ANY TWO**) (10)
- a) Dry wall construction
 - b) Use of ceramics
 - c) Embodied energy of materials.
- Q.2** Explain in brief / describe the following terms in detail. (**ANY TWO**) (10)
- a) Wattle and daub
 - b) Bamboo as a material
 - c) Thatch roof
- Q.3** Answer the following : (**ANY ONE**) (10)
- a) Explain LCA and LCCA in detail with sketches.
 - b) Explain Coir Board in detail.

SECTION – II

- Q.4** Write short notes on : (**ANY TWO**) (10)
- a) Uses of plastic
 - b) Damplon sheets
 - c) Construction of Domes and arches
- Q.5** Explain in brief / describe the following terms in detail. (**ANY TWO**) (10)
- a) Teflon sheets
 - b) Eco-link board
 - c) Green wall
- Q.6** Answer the following : (**ANY ONE**) (10)
- a) Use of gypsum in building construction and its application, characteristics and properties.
 - b) Explain in detail earth-bag construction with sketches.
