

3E1622

Roll No. _____

Total No of Pages: **2****3E1622****B. Tech III Sem. (Main/Back) Exam. Jan. 2016****Civil Engineering****3CE2A Civil Engineering Materials****Time: 3 Hours****Maximum Marks: 80****Min. Passing Marks: 26***Instructions to Candidates:*

Attempt any **five questions**, selecting **one question from each unit**. All questions carry **equal marks**. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.

Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)

1. NIL2. NIL**UNIT-I**

Q.1 (a) Explain dressing of stones. [8]

(b) Write about properties and uses of common building stones. [8]

OR

Q.1 (a) Explain various tests on stones. [8]

(b) Write about sources and types of stones. [8]

UNIT-II

Q.2 (a) Discuss Bull Trench and Hoffman's Kiln for burning of bricks. [8]

(b) Write in detail about Moulding and Drying of bricks. [8]

OR

- Q.2 (a) Discuss use of fly ash in manufacturing of bricks and cement. [8]
(b) Write about testing of Bricks and Tiles. [8]

UNIT-III

- Q.3 Discuss in details about manufacturing process of cement with figure. [16]

OR

- Q.3 (a) Discuss the setting time tests on cement. [8]
(b) Write about use of lime in construction. [8]

UNIT-IV

- Q.4 (a) Discuss various types of pointing with figure. [8]
(b) Write about method of seasoning of wood. [8]

OR

- Q.4 (a) Explain bulking of sand. Write about different types of sand. [8]
(b) Discuss properties of mild steel and HYSD steel. [8]

UNIT-V

- Q.5 (a) Discuss concept of Embodied energy. [8]
(b) Write about types and uses of glass. [8]

OR

- Q.5 (a) Write about blast furnace slag and silica fume. [8]
(b) Discuss use of aluminum and G.I. in construction. [8]