

Roll No. ....

## OLE-24065

### B. Tech. 3rd Semester (Civil Engg.) Examination – April, 2021

#### BUILDING CONSTRUCTION MATERIALS

Paper : CE-203-F

*Time : Three Hours ]*

*[ Maximum Marks : 100*

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*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

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**Note :** Attempt *five* questions in all selecting *one* question from each Section. Question No. **1** is *compulsory*. All questions carry equal marks.

1. Write short notes on the following :  $2 \times 10 = 20$

- (i) Thoothing
- (ii) Horn
- (iii) Ventilators
- (iv) Clay brick partition

- (v) Lean to roof
- (vi) Queen post truss
- (vii) Terra-cotta
- (viii) Pile foundation
- (ix) Raking bond
- (x) Heart wood

### **SECTION – A**

- 2.** (a) What are the qualities of first class brick ? Write down their uses also. Explain the field test of brick. 10
- (b) How is artificial stone prepared? What are its different forms ? 10
- 3.** (a) What are the causes of failure of foundation ? What remedial measures are to be taken to prevent such failure ? 10
- (b) What do you mean by Cavity Wall? What are various position of cavity wall explain with neat sketch. 10

## SECTION – B

4. (a) Bring out the differences among terrazzo flooring and mosaic flooring. 10
- (b) Explain King post and queen post truss with neat and clean sketches with difference. 10
5. Differential between the following with sketches :  
10 × 2 = 20
- (i) Paneled door and skylight
- (ii) Casement window and Pivoted window.

## SECTION – C

6. (a) Explain the causes of dampness in a building. 10
- (b) Explain the general principal of waterproofing of wet areas in a building. 10
7. (a) Differentiate between sound absorption and sound insulation. How do you insulate concrete floors ? 10
- (b) List the various factor to be taken into account in design of a conference hall. 10

## SECTION – D

8. (a) Describe the various types of composite masonry used in construction. 10
- (b) List the properties of good building bricks. 10
9. (a) What are the various characteristics of good timber to be used in engineering works ? 10
- (b) What consideration should be taken into account for internal and external plastering ? Give the specification for these for a residence. 10
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