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BMS College of Engineering, Bangalore-560019

(Autonomous Institute, Affiliated to VTU, Belgaum)

July / August 2017 Supplementary Semester Examinations

Course: Building Construction & Materials- I
Course Code: 09AT1DCBCM

Duration: 4 Hrs
Max Marks: 100
Date: 26.07.2017

Instructions: 1. Answer ANY FIVE FULL questions choosing ANY FOUR FULL questions from Module 1, 2, 3 & 4 and ANY ONE FULL question from Module-5
2. Assume any missing data suitably

MODULE - 1

- 1 Draw a cross section through an external load bearing brick wall of a one storied building to a scale of 1:10. The clear height of the roof can be taken as 3000MM. The drawing shall indicate all the dimensions and labels of all the components from foundation to parapet. **20**

MODULE - 2

- 2 Explain the following with relevant neat sketches. **5x4=20**
- i. Drawing conventions used for Brick, Stone, Wood and Concrete.
 - ii. Parapet wall.
 - iii. Coping and throating.
 - iv. Sill.
 - v. Plinth.

MODULE - 3

- 3 A one brick thick 'L' shaped wall having a length of 1900MM in both the direction has to be built in ENGLISH BOND to a height of upto 9 courses. Draw to a scale of 1:10 including labeling and dimensioning. **2x6=12**
- i. Plans of ODD and EVEN courses **1x8=8**
 - ii. Front elevation

OR

- 4 A one & a half brick thick wall has to be built to a length of 2100MM using a DOUBLE FLEMISH BOND to a height upto 9 courses. Draw to a scale of 1:10 including labeling and dimensioning. **2x6=12**
- i. Plans of ODD and EVEN courses **1x8=08**
 - ii. Front elevation

MODULE - 4

- 5 a) A flat brick arch has to be provided over an opening having a span of 1200MM in a brick wall. Draw to a scale of 1:10, front elevation of flat brick arch along with labeling and dimensioning. **10**
- b) Provide a semi-circular stone arch for a span of 1500MM. Draw the front elevation with neat labeling and dimensioning to a scale 1:10 **10**

MODULE - 5

- 6 Explain the following in brief: **2x10=20**
- i. Stabilized mud blocks
 - ii. Concrete block

OR

- 7 Explain the following in brief: **2x10=20**
- i. Lime mortar
 - ii. Glass
