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First Semester B.Arch. Degree Examination, June/July 2016
Materials and Methods in Building Construction - I

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE questions, choosing ONE question from each module.

MODULE - 1

- 1 Explain the various building components, with neat sketches (any four) :

- a. Foundation.
- b. Window.
- c. Chajja.
- d. Wall.
- e. Pitched roof.

(20 Marks)

OR

- 2 a. Name the various materials of building construction. Illustrate the same with sign conventions. (10 Marks)
b. What are the types of bricks? Explain their properties and uses with neat sketches. (10 Marks)

MODULE - 2

- 3 a. What are load bearing construction? (05 Marks)
b. Give a list of any two different types of bonds used in brick masonry with the help of neat sketches. (05 Marks)
c. Explain the following with sketches (any two) :
i) Queen closer ii) Half bat iii) King closer. (10 Marks)

OR

- 4 Draw to a scale 1:10 plan, Elevation and section of a parapet wall of brick 230mm thick and 0.9m height. (20 Marks)

MODULE - 3

- 5 a. Write manufacturing method of glass blocks, with its applications. (10 Marks)
b. Explain stabilized Mud blocks, with its merits and demerits. (10 Marks)

OR

- 6 a. Briefly explain the manufacturing methods of concrete blocks. Explain its application. (10 Marks)
b. Differentiate between hollow and solid concrete blocks with advantages and disadvantages. (10 Marks)

MODULE - 4

- 7 What is Foundation? Draw foundation for 230mm thick load bearing wall to 1:10 scale. (20 Marks)

OR

- 8 a. What are defects in timber? Explain in detail. (10 Marks)
b. What is seasoning of timber? Describe. (10 Marks)

MODULE - 5

- 9 Draw Plan, Section, Elevation of ledge, braced, battened door to the scale of 1:10 with min 2 joinery detailing of 1:2. (20 Marks)

OR

- 10 Draw Plan, Elevation and section of wooden glazed window of 1.2m × 1.2m with highlighting any two joinery detailing. (20 Marks)
