

BACHELOR OF ARCHITECTURE EXAMINATION, 2019
(B. Arch. 2nd year 2nd Semester)

SUBJECT: ARCHITECTURAL CONSTRUCTION- II

Time : Three hours

Full Marks: 100

Instructions: Answer for 100 marks. Use sketches wherever necessary.

01. With relevant sketches wherever necessary, describe the causes, symptoms and remedies of dampness in a building. Draw the different measures for protection of plinth of a building. Using construction details, describe how 'Plinth Protection' can be ensured using a peripheral concrete slab alongside a building and a storm water drain at its edge. 25
02. Describe the different types of plastering used in building works. Describe in detail how construction works of plain plastering in buildings are undertaken. Describe the thicknesses of plastering for ceiling, external and internal walls.

Using a couple of sketches, describe where the decorative mouldings were used in classical Architecture. Draw and name the various Decorative mouldings that are used in Architecture 25
03. Describe the reasons why the roofs of buildings should be treated. With suitable sketches, describe Lime concreting and terracing as a roof treatment detail. Also describe any one type of roof treatment detail which is much in practice in contemporary building construction. 25
04. Showing plans and elevations name the various types of Doors. Show details of construction of a 'timber panelled door' and any one other type of door for use in buildings. 25
05. Describe the process of surface preparation for plastering work to be undertaken. Describe how plastering work is undertaken on a wall. Mention the different types of plastering that are usually adopted in a building. Describe how the works of 'Anti-Termite Treatment' should be undertaken for construction of a building. 25
06. Using suitable sketches, describe different types of Windows. Draw details of construction of any one of the following:
(a) Casement Windows, (b) Sliding Windows and (c) Vertically sliding Windows. 25
07. Using suitable sketches, describe various kinds of Staircases. Show components and construction details of various parts of a typical staircase. Also show details of any one of the following:
(a) Typical arrangement of reinforcements in a concrete staircase slab and its landings
(b) Typical details of construction of staircase of an old building using Rolled Steel sections and burnt clay tiles at the waist slabs and landings. 25
08. Write short notes on (any five): (5X5)= 25
 - (i) Parapet and railings using glass and stainless steel
 - (ii) Winders in a staircase
 - (iii) Efflorescence and Salt Petre action
 - (iv) Balustrade
 - (v) Reinforcement arrangement for a window chhaja
 - (vi) Ingredients and their quantities (per cu.m. of concrete) in 1:1.5:3 concrete
 - (vii) Jamb
 - (viii) Hinged cleat and Buffer Block
 - (ix) Paver Blocks
 - (x) Transoms and Mullions