

KATHMANDU UNIVERSITY  
End Semester Examination  
February, 2025

Level : B.Arch.  
Year : III  
Time : 2 hrs. 30mins.

Course : ARCH 319  
Semester : II  
F. M. : 40

SECTION "B"

*Attempt ALL questions.*

1.
  - a. Calculate the size of the RCC isolated footing that bears the load of 285kN and transfers the load on the subsoil having a safe bearing capacity of 200kN/m<sup>2</sup>.
  - b. Draw neat sketches of the above foundation with all the required dimensions for construction showing all the reinforcement details of footing, column, footing tie and plinth tie-beam. [Assume all the other structural details like foundation depth, depth of footing pad, size of the column, tie-beam details etc.] [4+4]
2. Draw details with material specifications and dimensions of Machine-made brick cladding on a load-bearing stone walls (with no cavity) and 100mm wide cavity. [3+3]
3. Draw neat and detailed sketches showing the different ways you can join steel column (universal column) to column [one on the top of another]. [5]
4. Name all types of partition walls you know. Describe in detail (step by step) anyone with neat sketches the erection process of glass block partition wall you know well. [6]
5. Name all types of suspended ceilings with different materials. Also, describe in details anyone of those ceilings with the step by step fixing processes with detailed sketches. [6]
6. Write short notes on any three with required explanatory sketches. [3+3+3=9]
  - a. Difference between working drawing and the Architectural presentation drawing.
  - b. Different ways of lapping of main bars in RCC columns.
  - c. Functions and characteristics of good paints.
  - d. Deep (Pile) foundations (their working principles and types).
  - e. Opening recommendations in MRT in a load-bearing wall system.