



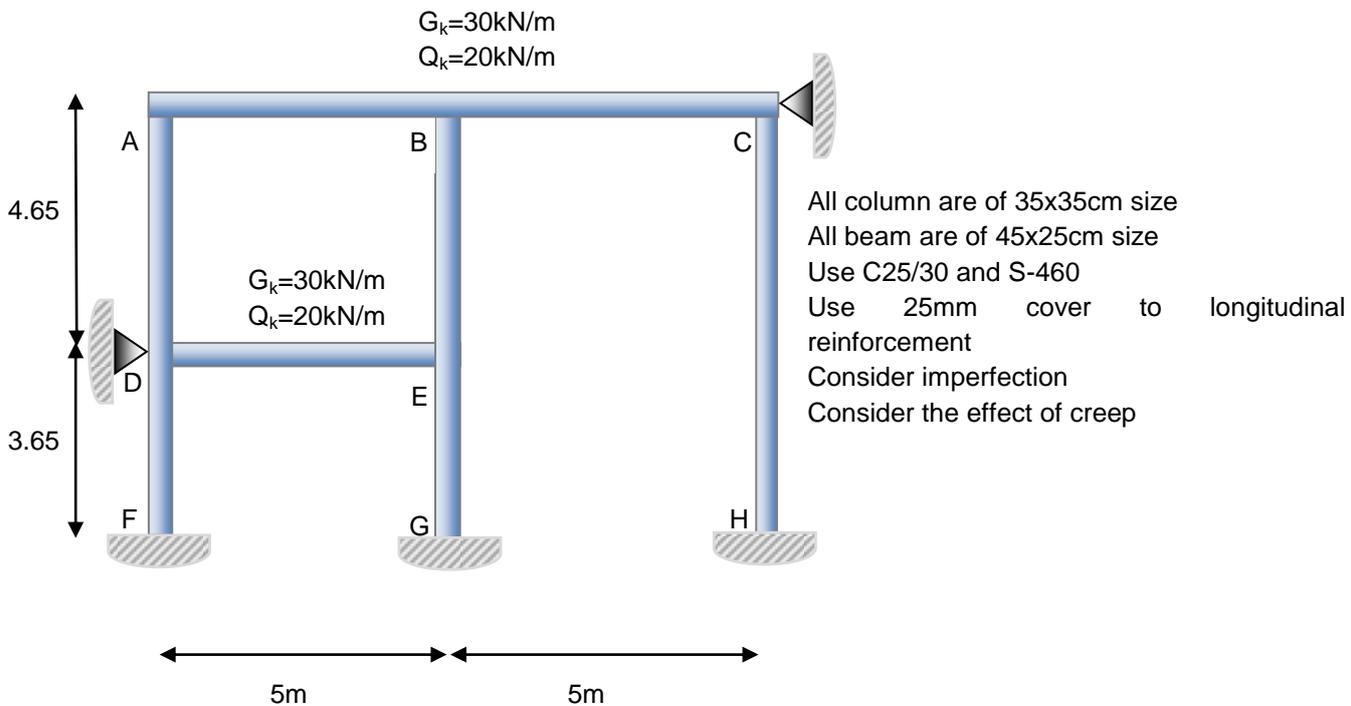
ASSIGNMENT ON CHAPTER FOUR

Assignment Title: Column Design

Due Date: One week

Thus, the aim of this assignment is to help students understand the design of concrete columns with emphasis on second order effect arising from slenderness.

Assuming the frame system below to be part of a building, answer questions I to V sequentially.



- I. Classify the frame system as braced or unbraced?
- II. Carryout the analysis of the frame system and plot the AFD, SFD and BMD?
- III. Identify each column (isolated) as short or slender?
- IV. Compute the equivalent first order and second order moment (if any) for each column?
- V. Design each column and show the necessary details in accordance to the Code?