



Benha University
Benha Faculty of Engineering
Date: 16-6-2021
Semester: Second Term
Examiner: Assoc. prof. Ayman
Abd El Hamid - Dr. Rasha Reyad
- Dr. Noha Hefnawy
Total Points: 75 Marks

Department: Civil Department
Program: Bachelor
Time: 3 Hours
Subject: Architectural Engineering
Code: CE 1208
No. of Pages: 2 Pages



Model Answer of Final Examination

Question ①

35 marks

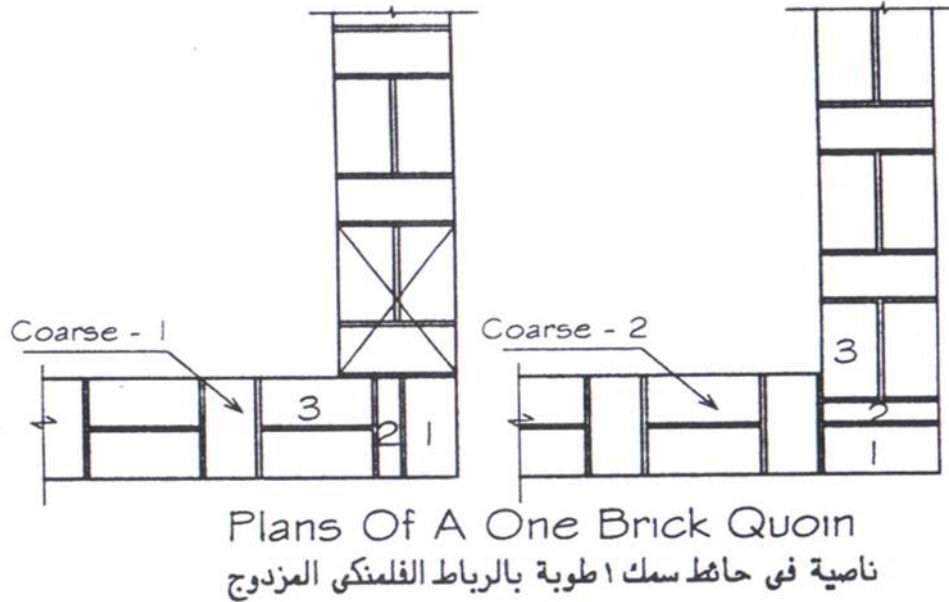
The following drawing indicates roughly plan view for a studio house. You are required to:

Questions	Criteria	Marks
A. Draw the working drawing of the ground floor plan. (Scale 1/50) (25 Marks)	Axis	4 Mark
	Structural Elements	6 Mark
	Inner Dimensions	2 Mark
	Outer Dimensions	2 Mark
	Doors	2 Mark
	Windows	2Mark
	Levels	2 Mark
	Stairs	2 Mark
	Name of Spaces and Finishing Materials	2 Mark
	Drawing Quality	1 Mark
B. Draw the working drawing of Elevation A. (scale 1/50) (10 Marks)	Axis	1 Mark
	Projection	4 Marks
	Dimensions	2 Marks
	Levels	1 Marks
	Openings	1 Mark
	Finishing Materials	1 Mark

Question ②

10 marks

Draw (in scale 1:10) a two subsequent courses of 25*25 cm "QUION" (L) of a masonry brick wall (Flemish bond).
(10 Marks)



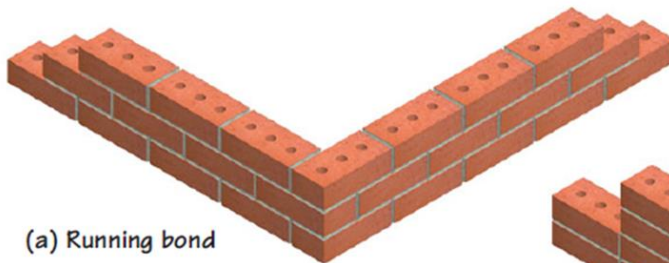
Question ③

﴿ 15 marks ﴾

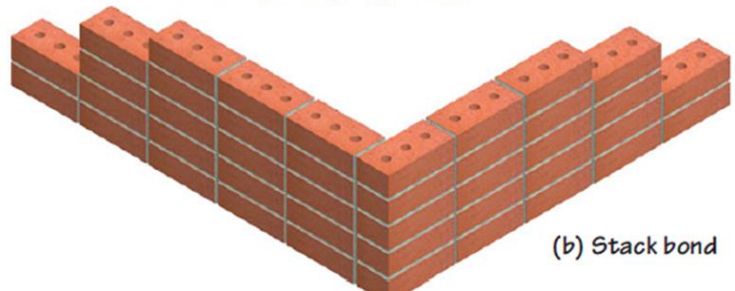
Compare using freehand sketching & data for the following items:

A. Stack bond & running bond in masonry works.

(7 Marks)



If cut bricks are not used, only two types of bonds (running bond and stack bond) are possible in a single-wythe wall. If the cutting of bricks (highly labor-intensive and costly) is acceptable, several other bond patterns, such as English bond, Flemish bond, etc. can also be created in a single-wythe wall.



B. Loose fill insulation Material & Semi rigid Insulation Material.

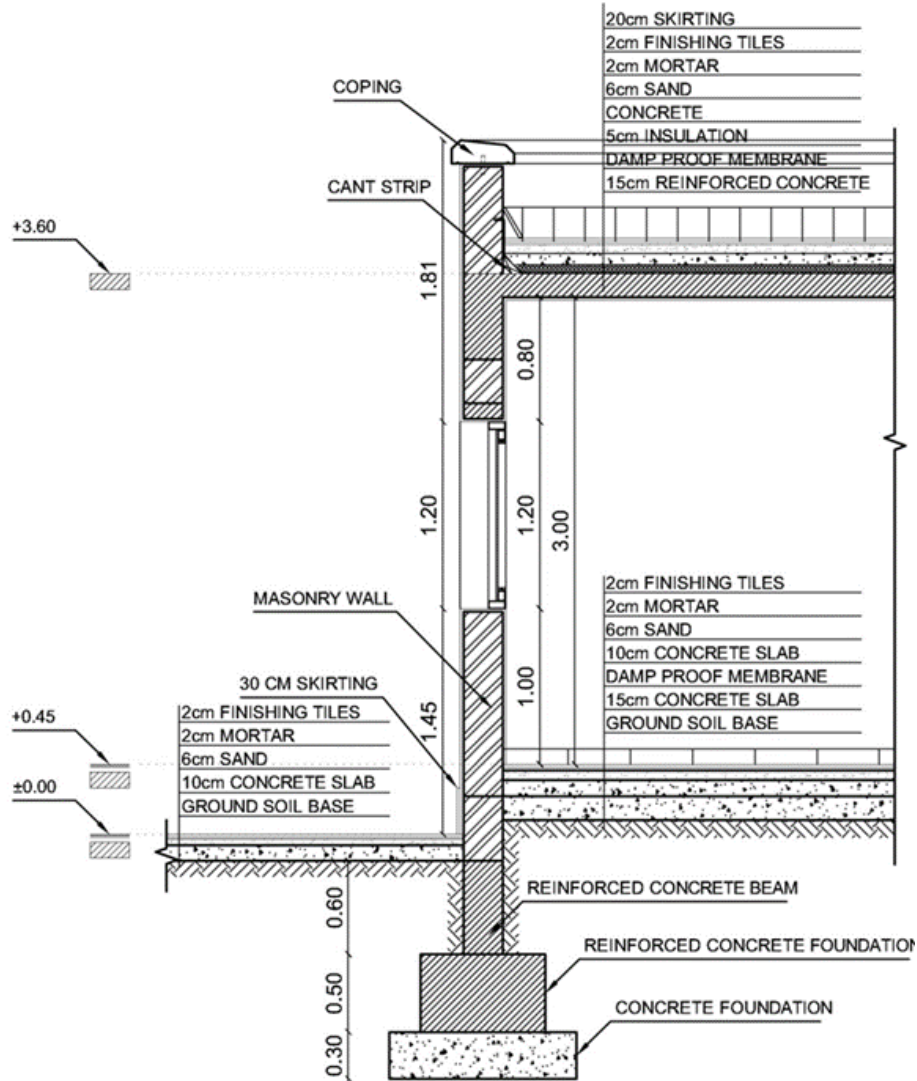
(8 Marks)



Question ④

{ 15 marks }

The following drawing indicates partial wall section A-A of a Storage building. The designer intends to use a Skelton structure system. You are required to draw the detailed wall section with all layers: (Scale 1:20).



Notes:

- Assume any missing data.
- Labels and annotations are integral part of all required drawings.
- Neatness of drawings and precision of lines will be regarded in grading.

Best wishes

End of the exam