

446/2
BUILDING CONSTRUCTION
Paper 2
(Project)
May - October 2022



THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education
Building Construction
Paper 2
(Project)

INSTRUCTIONS TO CANDIDATES

The attached drawings show parts of a building as follows:

TEST A: BLOCKWORK AND BRICKWORK

TEST B: TIMBER ROOF MODEL

Using the materials provided, build the walls and construct the timber roof model.

Notes:

- (a) *Masonry work should be set on a firm and fairly level ground.*
- (b) *All dimensions are in millimetres unless otherwise stated.*
- (c) *General tolerance:*
 - (i) ± 5 mm on masonry work
 - (ii) ± 4 mm on carpentry work
 - (iii) $+ 2$ mm on carpentry joints.
- (d) *Scribe your index number on all projects.*

This paper consists of 5 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

TEST A: BLOCKWORK AND BRICKWORK

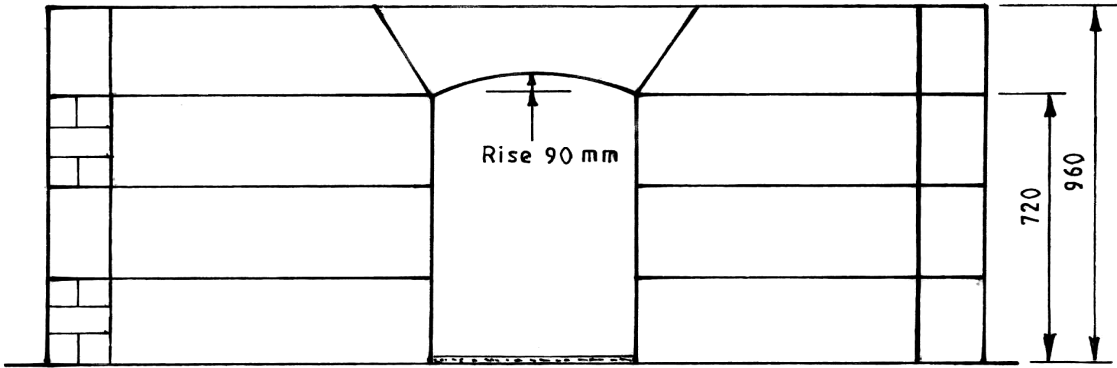
Test A shows an incomplete plan and elevation of a composite wall bridged with an arch. Part of the wall is to be plastered and given a wood float finish while the floor screed is to have a steel float finish.

Prepare the materials, bond and construct the wall.

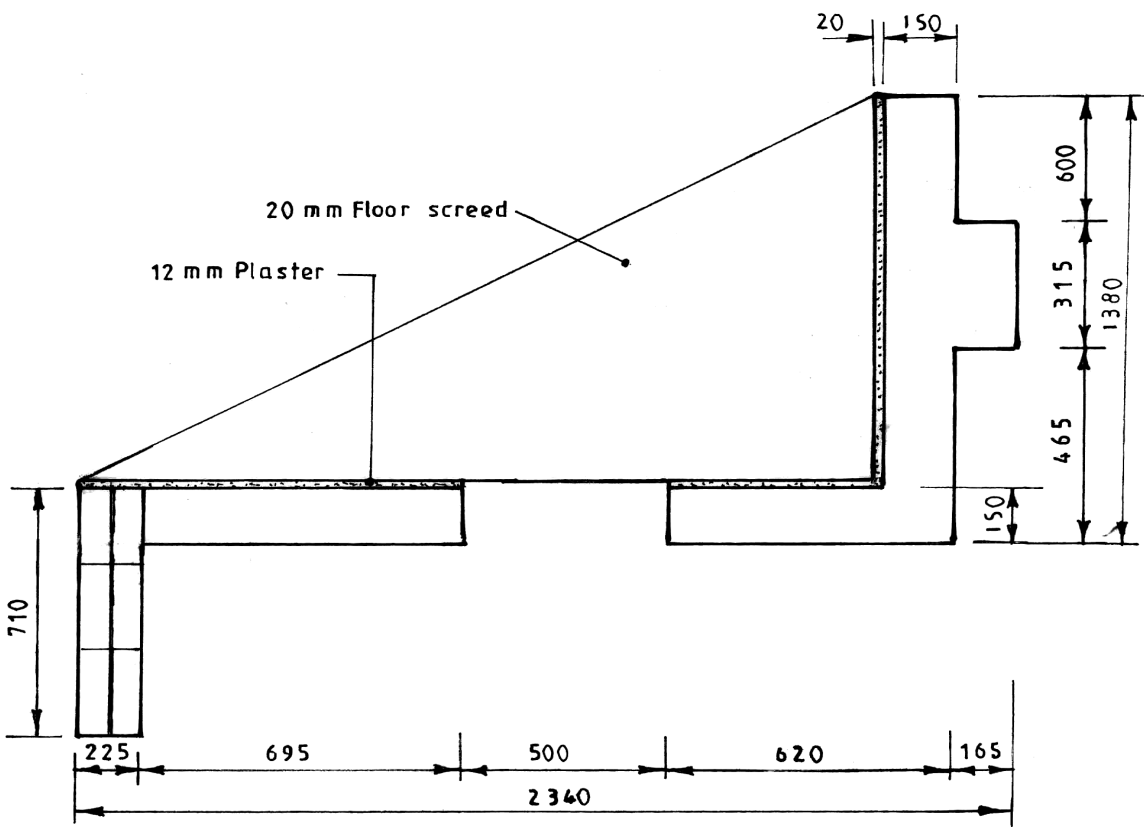
(54 marks)

Item No.	Description	Size	Quantity	Remarks
1.	Concrete Blocks	450 × 225 × 150	33	For walls
2.	Concrete blocks	450 × 225 × 225	4	For walls
3.	Clay bricks	230 × 115 × 75	40	For walls
4.	Mortar (lime / sand)	—	Sufficient	Walling and plaster
5.	Timber	1500 x 40 x 40	1	Gauge rod
6.	Timber	1500 x 150 x 25	1	Centering

TEST A: BLOCKWORK & BRICKWORK



FRONT ELEVATION



PLAN

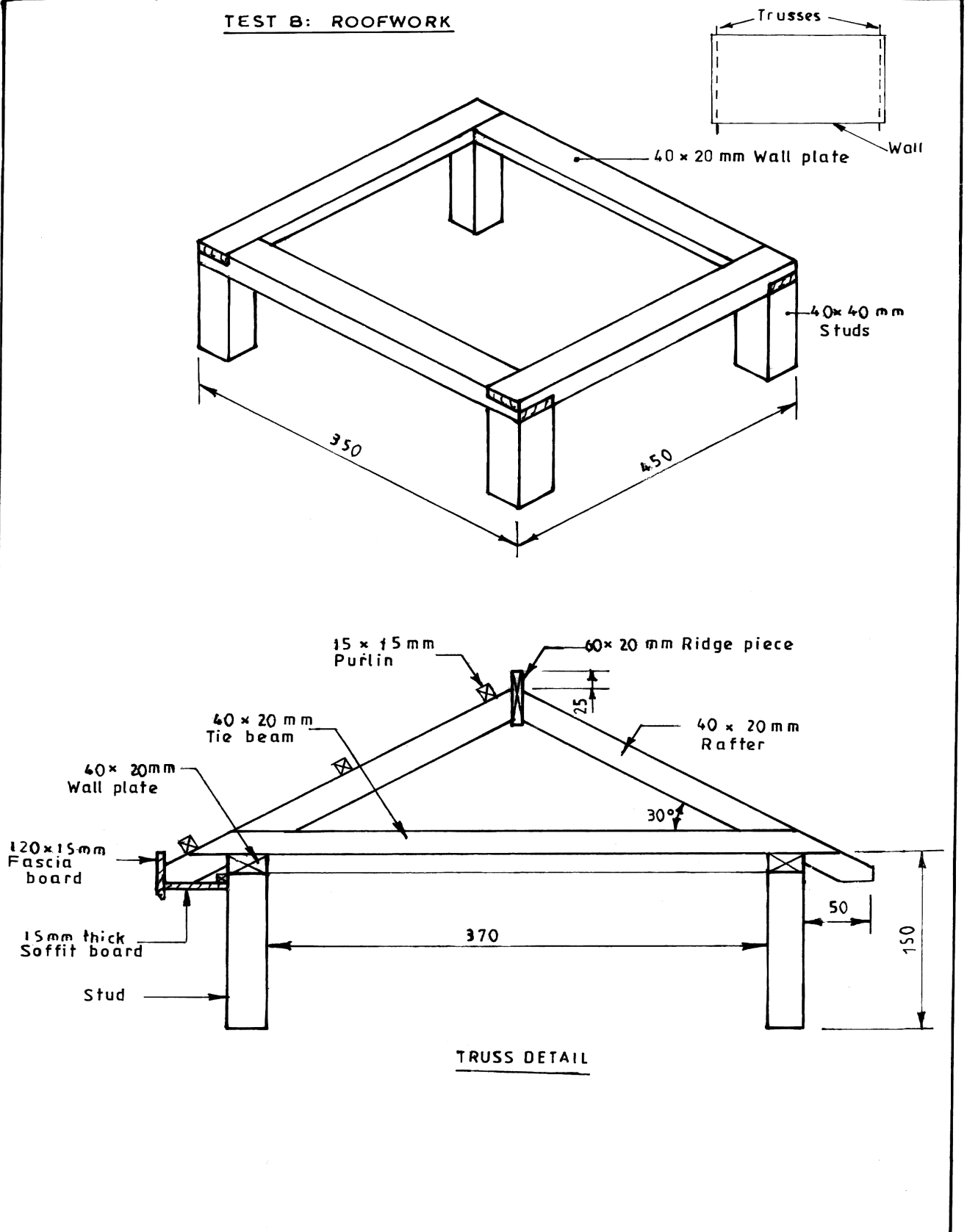
TEST B: ROOF WORK

Test B shows a pictorial drawing and truss details of a model roof.

Use the materials provided to construct the roof.

(46 marks)

MATERIAL SPECIFICATION PER CANDIDATE				
Item No.	Description	Finished Size	No off	Remarks
1.	Studs	40 x 40 x 150	4	
2.	Wall plate	20 x 40 x 1600	1	cut to size
3.	Rafter	20 x 40 x 1300	4	cut to size
4.	Tie beam	20 x 40 x 1200	2	cut to size
5.	Ridge piece	20 x 60 x 550	1	cut to size
6.	Fascia board	15 x 75 x 550	1	cut to size
7.	Soffit board	15 x 75 x 550	1	cut to size
8.	Purlins	15 x 15 x 550	3 pieces	cut to size

TEST B: ROOFWORK

THIS IS THE LAST PRINTED PAGE.