

P720/2

BUILDING DRAWING

PAPER 2

AUGUST 2016

3 HOURS

RESOURCE MOCK EXAMINATIONS, 2016  
UGANDA ADVANCED CERTIFICATE OF EDUCATION  
**BUILDING DRAWING**  
**PAPER 2**  
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**INSTRUCTIONS TO CANDIDATES**

- *This question paper consists of **five** questions. Answer all questions.*
- *All dimensions are in millimeters unless otherwise stated.*
- *Where dimensions are not given, use your discretion to determine suitable dimensions.*
- *Neatness is a must.*
- *A sheet of drawing paper size A2 is provided, use both sides of paper if need be.*

## SPECIFICATIONS:

- Walls:** All walls are  $225\text{mm}$  thick,  $3000\text{mm}$  high built in English bond.
- Roof:** Pitch  $30^\circ$ , covered with corrugated iron sheets on  $50 \times 75\text{mm}$  purlins on  $100 \times 50\text{mm}$  rafters with  $100 \times 50\text{mm}$  struts on  $150 \times 50\text{mm}$ , tie beam on  $100 \times 50\text{mm}$  wall plate, with  $100 \times 50\text{mm}$  ceiling joints finished with  $225 \times 25\text{mm}$  fascia/barge board.
- Foundation:**  $675 \times 225\text{mm}$  concrete strip foundation at a depth of  $750\text{mm}$  below ground level.
- Floor:** Finished with  $50\text{mm}$  sand cement screed on  $150\text{mm}$  concrete bed on  $150\text{mm}$  thick hardcore.
- Windows:**  $W_1$  –  $1200\text{mm}$  high  $\times$   $1200\text{mm}$  wide metallic casement with P.V.O.  
 $W_2$  –  $450\text{mm}$  high  $\times$   $1800\text{mm}$  wide, louvered metallic, with P.V.O.  
 $W_3$  –  $1200\text{mm}$  high  $\times$   $1200\text{mm}$  wide metallic casement, with P.V.O.  
 $W_4$  –  $600\text{mm}$  high  $\times$   $600\text{mm}$  wide metallic casement.
- Doors:**  $D_1$  –  $2100\text{mm} \times 2100\text{mm}$  parallel double shutter.  
 $D_{12}$  –  $2100\text{mm} \times 2400\text{mm}$  wide, battened, ledged, braced and framed.  
 $D_3$  –  $2100\text{mm} \times 900\text{mm}$  five panelled door.  
 $D_4$  –  $2100\text{mm} \times 900\text{mm}$  battened, ledged, braced and framed.
- Splash a prone:** Concrete slab  $150\text{mm} \times 600\text{mm}$

1. The figure shows a line diagram of a proposed plan of a residential house. Using the specifications and the line diagram, draw in good proportion a free hand pictorial sketch of the building with corner  $Y$  in the foreground. (18mks)
2. To scale 1:100 draw:
  - (a) the ground plan showing all doors and windows in their right positions. (17mks)
  - (b) draw the Front Elevation: Scale 1:50. (10mks)
3. Draw a sectional end elevation through  $m - m$  to show all the details from foundation to ridge cup. Label the roof, floor and foundation members including the covering material. Scale 1:50. (22mks)
4. To scale 1:10 draw the back elevation of  $D_4$  and name its members. (08mks)
5. Set your paper, at the bottom right hand corner of your drawing paper, draw a title block, in it print your name, title of the drawing, scale, index number and date. (05mks)