735/3 GEOMETRICAL AND BUILDING DRAWING Paper 3 2023 3 HOURS



# AITEL JOINT MOCK EXAMINATION

Uganda Certificate of Education

#### GEOMETRICAL AND BUILDING DRAWING

## Paper 3

#### **3 HOURS**

### **INSTRUCTIONS TO CANDIDATES:**

- This question paper consists of two sections I and II.
- Attempt ALL questions in this question paper.
- A drawing paper size A2 is provided, use both sides if necessary.
- Where dimensions are not given, use your discretion to determine missing dimensions.
- Figures in this paper are not drawn to scale.
- Interpret properly the specifications and figure provided before you attempt any question

Figure 1 provided below shows a ground plan of A **GUEST HOUSE** not drawn to scale. The house is to be constructed using the following specifications: SPECIFICATIONS:

ROOF: Hipped roof pitched at 30° pitch angle covered with corrugated, galvanized iron sheets, on wooden purlines of 75mm x 50mm, on struts of 100mm x 50mm on rafters of 100mm x 50mm, on Tie beam 150mm x 50mm, on wall plate of 100mm x 75mm finished with Fascia boards and verge boards of 200mm x 25mm.

WALLS: Both internal and external walls are 225mm thick and 3000mm high from the finished floor to the underside of the wall plate built in **ENGLISH BOND**,

**FOUNDATION**: Concrete strip foundation of 750mm wide and 250mm thick,

1200mm below the ground level.

**FLOOR**: Finished with cement sand screed 25mm thick on site

concrete 100mm thick, on hard core of 150mm thick, on well

compacted marrum.

**DOORS:** D1 1500mm x 2100mm is double leaf metal casement with

glass panes

**D2** 1000mm x 2100mm is a framed ledged braced battened

door.

D3 900mm x 2100mm is a framed ledged braced and

battened door.

**WINDOWS**: All windows are Louvered and fitted in wooden frames

**W1** 2400 x 1500mm

**W2** 900 x 1200mm

**W3** 900 x 1000m

**SPLASH APRON** Concrete slab of 650 by 150mm

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Turn over

# **SECTION I**

1. Using the Specifications given above, Draw a proportional free hand isometric sketch of the building with corner  $\mathbf{R}$  as the fore point.

(20 marks)

#### **SECTION II**

- 2 (a) To a scale of 1:100, Draw:
  - (i) the ground plan with all symbols indicated (20 marks)
  - (ii) the cross-section S S (25 marks)
- 3. To a scale 1: 10 draw the back elevation of **D2** and name at least five parts (10 marks)
- 4. At the bottom right corner of your drawing paper, print in the block your:

  Name, Index number, Title of the drawing, subject code and Date.(5 marks)