

## S4 735/3 HOLLIDAY WORK – Questions

### Instructions

- 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 provided use your own discretion to determine missing dimensions
- Figures in this question paper are not drawn to scale
- Interpret properly the specifications and figures provided before you attempt any question
- Neatness and good pencil work will earn you marks

The figure 1 provided shows the line diagram of a Self-contained guest wing of a residential bungalow. **The house is gabled on side B and hipped on all other sides.** The house is to be constructed using the following specifications.

#### SPECIFICATIONS:

WALLS: Both internal and external walls are 225mm built in one brick thick Flemish bond.

FLOORS: The house has a suspended timber floor on 300mm high sleeper walls, on 100mm concrete slab, on 150mm hardcore stones, on well compacted marrum.

FOUNDATION: Concrete strip foundation of 450mm wide and 200mm thick at a depth of 1000mm below the ground level.

ROOF: Roof is pitched at an angle of 30° covered with corrugated iron sheets, on wooden purlins of 75mm x 50mm, on struts of 100mm x 50mm on rafters of 100mm x 50mm, on tie beams of 150mm x 50mm, on wall

plates of 75mm x75mm finished with fascia boards and verge boards of

200mm x25mm.

DOOR: D1 900mm x 2100mm single leaf six paneled door with raised panels.

D2 900mm x 2100mm single leaf steel door.

D3 1200mm x 2100mm double leaf casement metallic door.

D4 900mm x 2100mm single leaf framed braced and battened door. WINDOWS: All windows are metallic casement windows with glass panes and

ventilators over the ring

beam; W1 1500mm wide x

1200mm high

W2 600mm wide x 600mm high

W3 1000mm wide x 1200mm high

SPLASH APRON: Concrete slab of 450mm wide

## **SECTION I**

1. Using the drawing in fig 1 and the specifications given above,  
draw  
a proportional free hand sketch of the building with corner E in  
the foreground.  
(20marks)

## **SECTION II**

2. Using the given specifications and the drawing in fig 1, draw to a scale of 1:50;
  - a) The ground floor plan and include fitments in the toilets and bedrooms. (22marks)
  - b) The sectional on cutting plane A-A and show clearly; (25marks)
    - i. All the doors viewed in the direction of the section line
    - ii. The geometrical construction of the arch.
    - iii. Construction of the suspended timber floor
  - c) The elevation in the direction of arrow C (20marks)
3. To a scale of 1:10, draw the isometric view of three courses of brick work bonding at corner E. (10marks)

4. At the bottom right hand corner of your drawing paper, print in the title block your; name index number, title of the drawing, subject code and date. (3marks)

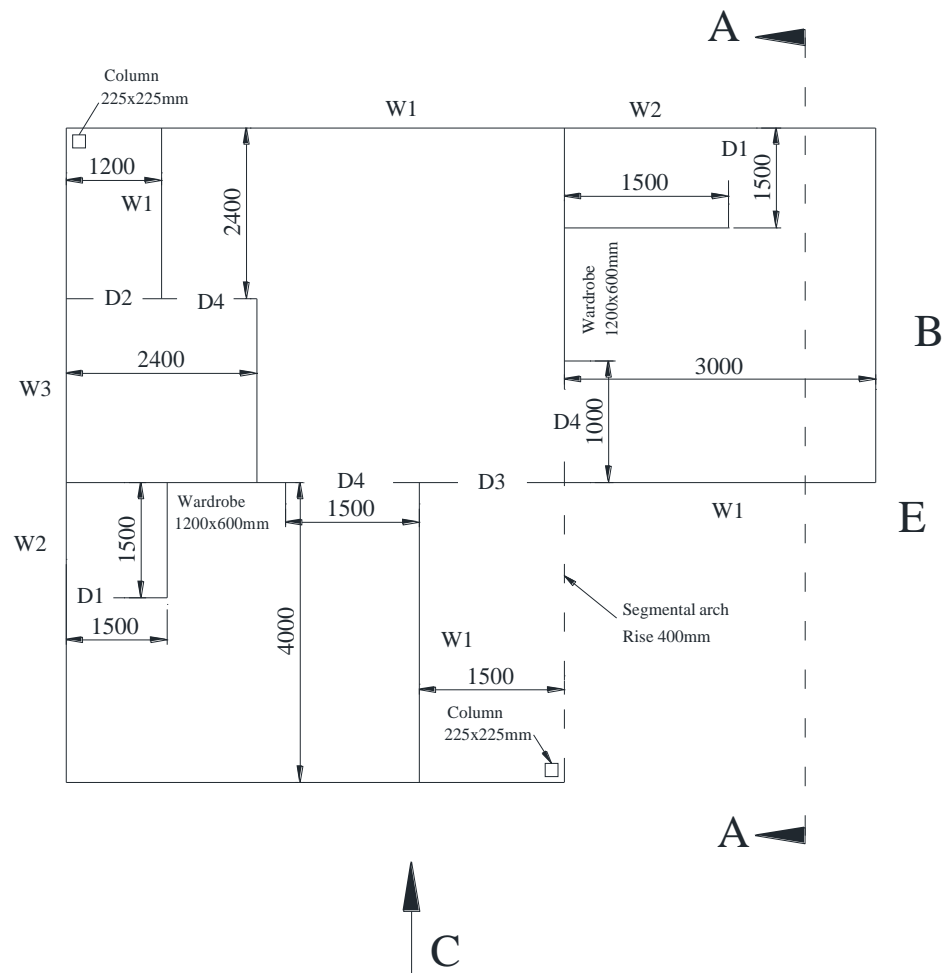


Figure 1: Line diagram