



PROGRAM : BACHELOR'S DEGREE IN CONSTRUCTION

SUBJECT : **CONSTRUCTION TECHNOLOGY**

CODE : **CONTED1**

DATE : SUMMER EXAMINATION 2019
23 NOVEMBER

DURATION : (SESSION 1) 08:30 -11:30

WEIGHT : **40:60**

TOTAL MARKS : 70

ASSESOR : MR C.E EMERE

MODERATOR : MRS Z. MOHAMMED

NUMBER OF PAGES : 3 PAGES

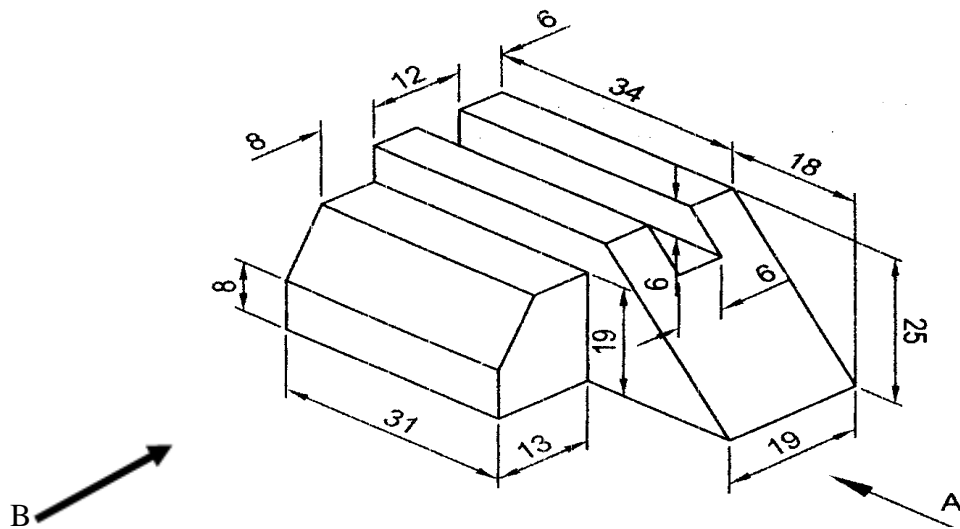
REQUIREMENTS : DRAWING MATERIALS

INSTRUCTIONS TO CANDIDATES:

PLEASE ANSWER ALL THE QUESTIONS. PLEASE WRITE CLEARLY
AND LEGIBLY
ANSWERS SHOULD BE NUMBERED AS PER THE QUESTIONS.

Question 1.0 [10]

Draw and dimension the front view (A) and side view (B) of the following diagram below in scale 1:1. [10 Marks]



Question 2.0 [10]

2.1 Define the following : Plan [2], Section [2], and Elevation [2]

2.2 What is the usual width of the passage of a building according to building regulation? [2]

2.3 What is the minimum floor level height above ground level according to the building regulation? [2]

Question 3.0 [10]

Draw to a scale 1:10, the alternate plan courses of a one- brick corner built in **Flemish bond**. Draw **stopped ends** on both sides, 880mm from the corner.

Question 4.0 [15]

4.1 State the 8 functions of external walls. [8]

4.2 Mention 4 advantages of cavity walls [4]

4.3 Mention 3 advantages of cavity walls [3]

Question 5.0 [15]

5.1 States the requirements of foundation [3]

5.2 What does the term *bearing capacity* mean? [2]

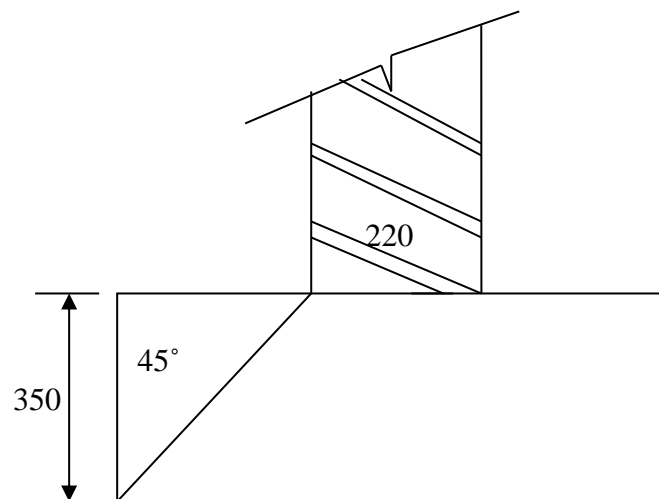
5.2 Draw to a scale 1: 10, a longitudinal vertical section of a *stepped foundation showing* two complete steps of the foundation. **Specifications:**

- The foundation is 275 thick and the steps are 1200 long.
- Insert all the mentioned dimensions to show the minimum lap of the step clearly, according to regulations.

Print the full title (highlighted in the first sentence of this question) and scale, centrally below the drawing, in 5mm high letters. [10]

Question 6 [10]

Draw to a scale 1:10 the **elevation of a profile board** suitable to be used to mark off the wall and foundation given in the sketch below.



The profile board consists of a 100x22 SA Pine strip attached to 38 x 38 sharpened timber supports. The profile board is 1000mm long and the supports are 700mm long. **Clearly dimension the distances between the nails in the profile board and fully annotate the parts of the profile board.**

TOTAL=70