

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART II – SUPPLEMENTARY EXAMINATIONS – JULY 2008
BAR 2102 – BUILDING CONSTRUCTION II

Instructions

Duration: 4 Hours

Answer All Questions.

Question 1 to be answered on a single A1 sheet to be provided.

Use pencil or technical pen for drawing.

Marks will be awarded to organised and neat drawing.

Do not write your name on the sheets

Question One

Draw a scaled typical cross section of a double storey dwelling with a queen post roof trusses over a span of 900 mm. A passage 1000mm wide is placed centrally within the dwelling. Show relevant details as appropriate scale(s). (50)

Question Two

Draw neat labelled sketches of the following.

- a) Elevation of a doorset with a four panelled shutter. (10)
- b) A concrete lintel with brick faggoting. (5)
- c) An axed segmental arch spanning an opening of 900 mm. (5)
- d) A typical detail of a cavity wall. (5)

Question Three

Briefly explain the purpose of a roof and its functional requirements. What determines the choice of a roof structure? (15)

Draw typical form of the following timber trussed roof specifying their maximum spans applicable.

- a) W (fink) truss
- b) Scissors truss
- c) Bowstring truss
- d) Fan truss (10)