

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF ARCHITECTURE AND QUANTITY SURVEYING

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART III END OF SECOND SEMESTER EXAMINATIONS – JUNE 2004
AAR 3208 – BUILDING CONSTRUCTION IV

Instructions

Time: 3 Hours

Answer All questions

Use the A1 sheet provided, you can draw either in pencil or ink.

Number all your sheets.

QUESTION 1

The Works Department at NUST has requested the Department of Architecture to design a shed measuring 36m x 12m for a maintenance workshop for the NUST vehicles. Design and draw to appropriate scales a typical steel struss on steel columns for the same for onward transmission to the structural engineer. Your drawing to show all relevant details (to include fitting of corrugated asbestos roofing sheets). [40]

QUESTION 2

Design and draw to scale a decorative open, suspended ceiling on reinforced concrete slab for a lecture room, at measuring 8m x 6m. [20]

QUESTION 3

A corporate concern has asked you to improve the façade of its building which measures 9m x 4.2m high with a central located double sliding door (opening 1,8m). The finish is to be of granite cladding. Produce drawings for the same for costing by the quantity surveyor. [20]

QUESTION 4

Draw typical sketch details of the following:

- a) Raised floor for a computer lab measuring 20m x 8m.
- b) How a castilated esteel beam is made.
- c) RC. retaining wall (3.6m high)
- d) Solid and hollow structural steel fire protection. [20]