

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

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART III SUPPLEMENTARY EXAMINATIONS – JULY 2005

AAR 3208 – BUILDING CONSTRUCTION IV

Instructions

Time: 4 Hours

Answer **all three (3) questions.**

Question 1 is to be answered on a single A1 sheet separately

Marks will be awarded to neatly presented work.

You can draw either in pencil or technical pen.

Number all your sheets.

Do not write your name on any sheet.

QUESTION 1

Alternative construction details for the two seminar rooms under the Part I Architecture Studios (at NUST) pertaining to the flooring system, partitions and ceilings are being proposed for the construction of a similar building. The two rooms each on first floor measuring eight metres (8m) by six metres (6m) with corridor measuring one and half metres (1.5m) wide linking them. Slab to slab height is to be 3.9 m. A Studio is also planned above the two rooms.

Draw the details for the G+2 structure as follows:-

- a) Typical I section showing a composite floor of PCC planks spanning the 7.5 m wide span.
- b) Sound proof partitions between the rooms and solid lightweight external wall along the corridor
- c) Ceiling plan showing panelled suspended (off concealed tee sections) kerfed and rebated tiles

[50]

QUESTION 2

Produce scaled detailed drawings of the following external works:-

- a) Typical combination (RCC and brick) retaining wall 900mm high
- b) Typical. precast concrete panels on in situ concrete box drainage channel and any three forms of open drainage channels

[25]

QUESTION 3

Draw typical sketch details to illustrate the difference between each of the following:

- a) Sprung floor and a raised floor
- b) Castillated steel beams and a steel girder
- c) Cladding and curtain walling.

[25]