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

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HOUNORS) DEGREE

PART II - SUPPLEMENTARY EXAMINATION - AUGUST 2005
AAR 2202 - BUILDING CONSTRUCTION II

Instructions ***Time: 3** Hours*

Answer All Questions

QUESTION 1

A proposed rectangular double storey building comprising of four classrooms measures 18 000mm by 7 660mm. The 7 660mm is inclusive of 1 660mm corridor with five (5) brick columns measuring 460mm by 460mm on the edge of the corridor on both ground & first floors. The roof will be a cantilevered flat roof type with a parapet wall. The floor slab is 150mm thick. The headroom is 3 600mm for each floor. This building will be constructed in Bulawayo.

a) Provide a sectional detail of this roof showing all roof members**.** **(10)**

b) State the purpose of each roof member. **(10)**

c) Using drawings clearly showing how you would drain rain water from this roof. **(10)**

d) Compare & contrast flat roofs with steep pitched roofs. **(10)**

QUESTION 2

a) What type of stair would you recommend for the building in question one? Give reasons for your choice**.** **(5)**

b) Draw the plan and section of the above stair. Clearly show your calculations. **(10)**

c) What are the advantages of r.c. stairs. **(5)**

QUESTION 3

a) Differentiate between the following:
   i) Dubbing and hacking
   ii) Floating and rendering
   iii) Checking chalking dado and skirting **(8**)

b) Describe the main categories of wall finish. **(6)**

c) Draw details of stone cladding**.** **(6)**

QUESTION 4

a) What type of doors would you recommend for the following?

i) Bathroom, ii) showroom iii) restaurant

vi) cinema hall & bank entrance **(10)**

b) Draw a section & a plan of at least one of the above doors. **(10)**