

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

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART II - SUPPLEMENTARY EXAMINATION - JULY 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)**