

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
FACULTY OF THE BUILT ENVIRONMENT

**DEPARTMENT OF ARCHITECTURE**  
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART II END OF SECOND SEMESTER EXAMINATIONS – JUNE 2007  
**AAR 2202 – BUILDING CONSTRUCTION II**

**Instructions**

**Duration: 4 Hours**

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

**Question 1 is to be answered on a single title blocked 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.**

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**QUESTION 1**

State briefly the requirements of a good staircase and design and draw (plan and section) to appropriate scales an RCC stair case for an office building leading from ground to first floor. Height of the floor is 4.2m and the width of the steps is 1.2 m. Provide lift wells to the right of the stair case. Both the stair case and the lift wells are flash with the external well of the building.

Draw details of fixing details of the steel hand rails and state the reasons of the rises and threads adopted by you.

[50]

**QUESTION 2**

Design and draw (plan, section and elevation) of a typical living room brick fireplace of maximum width 1.2m and internal projection of maximum 500mm. The chimney comes out in the middle of a sloping roof (under concrete tiles) at the gabled end. Show drainage details.

[25]

**QUESTION 3**

Write short notes with the aid of sketches on

- a) The functional requirements of a good upper floor
- b) Termite treatment in ground floors
- c) Different types of materials used for wall cladding

[25]