

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**FACULTY OF THE BUILT ENVIRONMENT**

**DEPARTMENT OF ARCHITECTURE**

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

**2010-2011 ACADEMIC YEAR**

**PART II-SECOND SEMESTER EXAMINATIONS-MAY 2011**

**AAR 2202- BUILDING CONSTRUCTION II**

**Instructions**

**Duration: 4 Hours**

Answer ALL questions. Use an appropriate scale for drawings.Q1b to be done on A1.

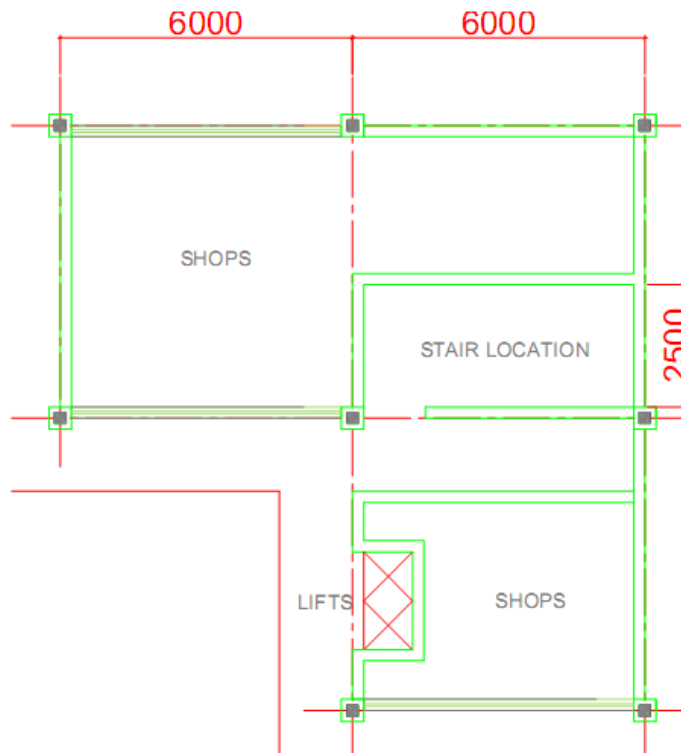
Marks will be awarded to neatly presented work.

You can either draw in pencil or technical pen.

Number all your sheets and do not write your name.

**QUESTION 1**

- a. State and explain the functional requirements of stairs [10]
- b. A four storey shopping complex is set on a 6 x 6m grid. It is serviced by lifts measuring 2 x 1m and is located as shown in the diagram below showing part of the complex. Design a public stair in the location shown. Draw a section through the stair showing access from ground to first floor. Assume floor to floor height to be 3m. Indicate various names of parts and components [40]



**QUESTION 2**

- a. What are the functions of doors? [5]
- b. Illustrate with the aid of sketches the different types of wooden doors used in construction. [15]
- c. A timber door and frame have been proposed for the stairwell give advantages and disadvantages for the choice. Draw a section through the door. [5]

**QUESTION 3**

- a. Comment on the type of wall finishes that can be used in the stairwell. [5]
- b. What factors are considered in the choice of such [5]

**QUESTION 4**

- a. What are the functional requirements of roofs. [5]
- b. Sketch details of the lower and upper ends of a low slope roof design for the complex. [10]