



**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**FACULTY OF THE BUILT ENVIRONMENT**

**DEPARTMENT OF ARCHITECTURE**

**BUILDING CONSTRUCTION II**

**AAR 2202**

**Examination Paper**

**May 2016**

This examination paper consists of 2 pages

**Time Allowed: 4 hours**

**Total Marks: 100**

**Special Requirements: A1 Sheets, T-squares, Drawing Boards, Masking Tape**

**Examiner's Name: Miss M. V. Mudombo**

**INSTRUCTIONS**

1. Answer all three (3) questions
2. Use an appropriate scale for drawings.
3. Illustrate answers with sketches
4. Marks will be awarded to neatly presented work.
5. You can either draw in pencil or technical pen.
6. Number all your sheets and include candidate numbers only.

**MARK ALLOCATION**

<b>QUESTION</b>	<b>MARKS</b>
1.	50
2.	25
3.	25
<b>TOTAL</b>	<b>100</b>

### **QUESTION 1**

- a. List any five functions of doors giving examples of the type of doors appropriate for each function. [10]
- b. Using any 2 different door operation mechanisms you have studied, draw for each a typical plan, section and elevation of any of the following types of doors using an appropriate scale:
  - i. aluminium framed glass door [15]
  - ii. battened, ledged and braced door [15]
- c. Draw a typical section of a steel-framed window clearly showing the various components and how to prevent water permeation. [10]

### **QUESTION 2**

- a. What factors influence the design and location of a typical domestic fireplace? [5]
- b. Give a detailed typical vertical cross section through the throat of a ground floor masonry fireplace for a living room. [10]
- c. Draw typical details of the following:
  - i. Curtain walling attachment to the structural frame of the building [5]
  - ii. Timber cladding of a brick wall [5]

### **QUESTION 3**

- a. Illustrate with the aid of sketches the different forms of stairs you have studied. [10]
- b. Sketch a detailed section through an open riser steel stair showing the various components that make up a stair. [10]
- c. A client is debating between the use of parquet or carpet in their living room. Advise them on the comparative performance of the two finishes giving your recommendations. [5]