



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

BUILDING CONSTRUCTION 1

AAR 2102

Supplementary Examination Paper

July 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 do not write your names.

MARK ALLOCATION

QUESTION	MARKS
1.	40
2.	30
3.	30
TOTAL	100

QUESTION 1

- a. List any five functions of a roofing system [5]
- b. Using appropriate scales, draw crucial details of the following types of roofs:
- i. Butterfly roof [5]
 - ii. Tensile roof [5]
 - iii. Hipped roof [5]
 - iv. Flat concrete roof [5]
 - v. Parapet monopitch roof [5]
- c. With the aid of sketches explain how a green roofing system works. [10]
- [40]**

QUESTION 2

- a. Describe with the aid of sketches the different methods used to ensure safety on a construction site. [10]
- b. Describe with the aid of sketches any 5 different types of foundations you have learnt and in what conditions they are applied. [20]

QUESTION 3

- a. Use examples to differentiate a load bearing wall from a non-load bearing wall? [8]
- b. Draw a clearly labelled section of exterior timber walling system stating the functions of each component. [10]
- c. Define the following terms with the aid of annotated sketches:
- i. Suspended timber floor [3]
 - ii. Solid floor [3]
 - iii. Sprung floor [3]
 - iv. Cavity wall [3]
- [12]