



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF LANDSCAPE ARCHITECTURE AND URBAN DESIGN

BSC PROPERTY DEVELOPMENT AND ESTATE MANAGEMENT

BUILDING CONSTRUCTION II

AAR 2203

Supplementary Examination Paper

December 2016

This examination paper consists of 3 pages

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: None

Examiner's Name: Mr E Musebenzi

INSTRUCTIONS

- Answer any three (3) questions from Section A. Section B is **compulsory**.
- Each question carries 25 marks
- Marks will be awarded to neatly presented work.
- You can either draw in pencil or technical pen.

MARK ALLOCATION

QUESTION	MARKS (ANY SELECTED FOUR)
1.	25
2.	25
3.	25
4.	25
5.	25

Copyright: National University of Science and Technology, 2016

SECTION A

Question 1

- a) Describe the function of the following construction elements in Zimbabwe:
- i. Hollow Core Doors (4)
 - ii. The Roof Insulation System (4)
 - iii. Sealants (4)
 - iv. Vapour Retarder (4)
- b) Briefly explain the difference between a fire place and a chimney. Give a detailed cross section through a masonry fire place (9)

[25]

Question 2

By using diagrams, explain the conditions that are necessary for the use of the following types of construction elements.

- i. Glass and Stone Cladding system(10)
- ii. Cold and Warm deck roof system(15)

[25]

Question 3

Explain briefly the following terms in construction with the aid of diagrams where necessary:

- i. Traditional and Contemporary Finishing Materials (5)
- ii. Six Panelled Door (5)
- iii. Chimney (5)
- iv. Steel Butt Hinge (5)
- v. Steel Cladding (5)

[25]

Question 4

With the aid of the diagrams, discuss five factors to be considered in determining the wall finishes to be used for any particular building. [25]

Question 5

- a) What do you understand by the following terms in construction:
- i) Weather stripping (3)
 - ii) Sealants? (2)
- b) What are the factors to consider in the design and setting out of a fireplace? (5)
- c) Design a detail where a chimney meets a concrete tiled roof and clearly label its parts. (15)

[25]

SECTION B (COMPULSORY)

Question 6

- a) Draw a section through a Rumford fire place and indicate all the necessary information in the production of the correct data for its construction purposes.(15)
- b) Explain the use of WallCladding inbuilding construction. Provide a section through any two types of Claddings you are familiar with.(10)

[25]