

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

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

**PART I – SUPPLEMENTARY EXAMINATIONS- JULY 2007
AAR 1204- INTRODUCTION TO MATERIALS AND CONSTRUCTION /
AAR 1208- INTRODUCTION TO CONSTRUCTION MATERIALS 1**

INSTRUCTIONS

Time: 2 Hours

*Answer ANY FOUR Questions.
All Questions Carry Equal Marks.
Use sketches where ever possible.*

QUESTION 1

- a) Which properties of granite make it suitable for application as a building material? (5)
- b) State five classes of glass and explain in point form how they are manufactured. (20)

QUESTION 2

- a) What advantages do concrete blocks have over clay bricks? (5)
- b) Using sketch drawings illustrate three different types of concrete block units and give examples of their applications. (20)

QUESTION 3

- a) Oil-type preservative treatment of timber is much preferred than waterborne preservative treatment. Explain. (10)
- b) Briefly explain the difference between thermoplastics and thermo-setting plastics. Give examples of where they can be used. (15)

QUESTION 4

- a) Using sketch drawings give the different types of typical stone joints. (10)
- b) Write brief notes on safety glass. (15)

QUESTION 5

- a) Which steps are taken when selecting soil for rammed earth wall construction?
Write brief notes on rammed earth stabilizers. (10)
- b) Provide a schematic drawing of a proposed three storey commercial building to be constructed in Bulawayo CBD and clearly indicate the type of glass to be used, Explaining how it is going to perform its purpose. (15)