

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
FACULTY OF ARCHITECTURE AND QUANTITY SURVEYING

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

PART II END OF FIRST SEMESTER SUPPLEMENTARY EXAMINATIONS – MAY 2007  
**AAR 2102 – BUILDING CONSTRUCTION II**

**Instructions**

**Duration: 4 Hours**

**Answer all three(3) questions.**

**Question 1 is to be answered on a single title blocked A1 sheet separately**

**Marks will be awarded to neatly presented work.**

**You can draw either in pencil or technical pen.**

**Number all your sheets.**

**Do not write your name on any sheet.**

**QUESTION 1**

- a) Draw a scale typical elevation of an axed arch spanning an opening of 1,2m to show as much as possible the technical terms associated with arch construction.
- b) Draw a plan ,an elevation and section of a casement window showing all relevant details to include water proofing

[50]

**QUESTION 2**

Write short notes with illustration on the following

- a) Distinguish between framed door and flush door (10)
- b) State the advantage of single joist timber floor. Explain with the help of sketches the construction of single timber joist floor of a room of size 3.0m by 4.5m (15)

[25]

**QUESTION 3**

- a) Explain with the help of sketches the following:
  - i. Couple roof
  - ii. Double close roof
  - iii. Collar beam roof
  - iv. Collar tie beam roof
- b) What precautions are necessary to be taken while excavating in very soft soil

[25]