

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

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART III FIRST SEMESTER EXAMINATIONS – JANUARY 2004
AAR 3108 – BUILDING CONSTRUCTION III

Instructions

Time : 3 Hours

Answer All Questions

Use clearly annotated drawings to illustrate your answers.

QUESTION 1

(a) What do you understand by the terms:

- i. floating slab
- ii. suspended slab

Show with illustrations how you can apply both forms of slabs on the ground floor of a structure on an incline site.

(b) Illustrate with neat sketches the various methods for damp prevention in buildings above ground level.

QUESTION 2

What do you understand by the term “underpinning” in the building construction? What do you understand by the terms. Describe the various possible methods of underpinning in the foundation of multi-storey buildings.

QUESTION 3

Explain the term “scaffolding” as used the construction industry. State the various methods used and the advantages of steel scaffolding.

QUESTION 4

Describe with neat sketches how you will carry out the following:

- (a) Construction of abasement to an existing building.
- (b) An upper floor to an existing building in front of a street and is to be constructed without causing any obstruction to the road or pavement
- (c) An Opening for a door is to be made in an existing wall.

QUESTION 5

- (a) What are the requirements of good form-work?
- (b) What safety rules should be adhered to in the demolition of buildings?