

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 inclined 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? Describe the various possible methods of underpinning in the foundation of multi-storey buildings.

QUESTION 3

Explain the term “scaffolding” as used in 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 a basement to an existing building.
- (b) Construction of an upper floor to an existing building in facing on to a street which 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 formwork?
- (b) What safety rules should be adhered to in the demolition of buildings?