

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

BACHELOR OF ARCHITECTURE (HONOURS) DEGREE

2010-2011 ACADEMIC YEAR

PART III – FIRST SEMESTER EXAMINATIONS – JANUARY 2011

PART III BUILDING CONSTRUCTION – AAR3108

Instructions

Time: 3 hours

Answer all questions

QUESTION 1

a) Briefly explain the main factors that govern selection of construction plant and equipment. (20)

b) A contractor for a project you are supervising in a confined city center site is proposing use of cranes for lifting building materials.

Identify with justifications the type of crane to use. (10)

[30]

QUESTION 2

a) Explain briefly 5 consideration factors before commencement of demolition works. (20)

b) You have been commissioned to work on the restoration of a 2 storey building of reinforced concrete, burnt down by fire. The works requires that most of the existing structure is demolished.

Carefully explain only 2 methods of demolition to be employed. (10)

[30]

QUESTION 3

a) Define the term foundation and explain 2 of its importance to the building structure. (8)

b) Explain the term pile foundation and point out 4 factors that necessitate need for deep foundations. (20)

c) State 3 basic information to be supplied to a piling contractor for tender purposes. (12)

[40]