

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

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART III - END OF FIRST SEMESTER EXAMINATIONS – DECEMBER 2006
AAR 3108 – BUILDING CONSTRUCTION III

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

Design and draw to scale a structural plan and section flea market shed without walls covering an area of 24m by 36m. The structure shall be a two bay symmetrical lattice steel cantilevered (umbrella) roof is to be supported on a total of eight (8) steel columns.

Draw details of

- a) Fixing methods
- b) Lattice girder details
- c) Valley gutter details

[50]

QUESTION 2

- a) Describe details of casting of precast concrete piles and draw free sketches of a typical foundation.
- b) Write short notes on the following.
 - i. Steel formwork
 - ii. Removal forms
 - iii. Form linings

[25]

QUESTION 3

Write short notes on

- a) Flying shore
- b) Truss-out scaffolding
- c) Suspended scaffolding
- d) Asphalt tanking

[25]