NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

DEPARTMENT OF QUANTITY SURVEYING

PART IV SUPPLEMENTARY EXAMINATIONS – AUGUST 2011

MEASUREMENT III – AQS4107

Time: 3 Hours   Total Marks: 100

Instructions
Answer All Questions

Assumption on missing information should be clearly stated.

SECTION A (Plumbing)

Using attached drawing, Take off measurements for the following

a) Cold water supply   (25 marks)

b) Soil drainage   (25 marks)

SECTION B (Earthworks)

Calculate the volume of excavation of a 1 km irrigation canal whose side slopes are 1:1,5 and 1:1,75the base width of 500mm. The sections are taken at 200m chainage and the mid section depths as follows,

Section	Mid section depth(m)
1-2	0.60
2-3	0.95
3-4	1.20
4-5	1.20
5-6	2.00

(25 marks)

SECTION C (Structural)

Calculate the mass of structural steel for the roof including the stanchions shown in the figure

(25 marks)

Note:

All concrete to be in grade 30 and reinforced

Reinforcement to concrete to be @ 165kg/m3

END OF EXAMINATION