

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF QUANTITY SURVEYING
BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE
2010-2011 ACADEMIC YEAR
PART I – SECOND SEMESTER EXAMINATIONS – MAY 2011
MEASUREMENT I - AQS 1203

Instructions

Time: 3 hours

Answer Question One (1) and any other Two (2).

QUESTION ONE

Take off the following foundation items from the attached drawings:

- I. Topsoil excavations
 - II. Trenches excavations
 - III. E.O excavations for hard pickable
 - IV. Ditto for rock
 - V. Earthwork support
 - VI. Concrete strip footing
 - VII. Brickwork and brick force
 - VIII. DPM
 - IX. Hardcore
 - X. Concrete bed
- [40 marks]

QUESTION TWO

- a) Using the same drawings, take off superstructure brickwork items and make adjustment for openings.
 - b) If you have been instructed to use 52 bricks /m² on 115 walls and 103 bricks /m² on 230mm walls, how many bricks can you order?
[Ignore beam filling]
- [30 marks]

QUESTION THREE

- a) Take off all roof covering items.
[Eaves overlap from the external wall by 400mm] [20 marks]
- b) Given that plain tile size 450x400mm and 40mm overlap both sides and allowing 5% waste, calculate the total number of plain tiles to be ordered. [5 marks]
- c) Given that each half round ridge / hip tile is 450mm long, allowing 70mm end lapping and 5% waste, calculate the total number of half round tiles to be ordered. [5 marks]

QUESTION FOUR

- a) Outline the duties of a contractor's Quantity surveyor. [10 marks]
- b) Outline five (5) uses of a bill of quantities to a contractor. [10 marks]
- c) Explain the following words:
- I. Ditto
 - II. Dotting on [4 marks]
- d) What does the system of measurement say (specify the clauses) about the measurement of the following:
- I. Damp proof course
 - II. Beam filling
 - III. Pelmet
 - IV. Barge boards
 - V. Raking cutting to valley tiles. [6 marks]