

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

DEPARTMENT OF QUANTITY SURVEYING

PART II SUPPLEMENTARY EXAMINATIONS – AUGUST 2013

CONSTRUCTION ESTIMATES AND PRICING – AQS2205

Time: 3 Hours

Total Marks: 100

Instructions

Answer all questions

Where information is not adequate, assumptions made must be clearly stated

QUESTION ONE

- a) Define the role of an estimator in a construction company (5 marks)
- b) Discuss the rationale of a quality management system in the estimating function for tender (20 marks)

QUESTION TWO

- a) Explain by giving examples where appropriate the following estimating methods.
- i) Superficial (5 marks)
- ii) Elemental estimate (6 marks)
- iii) Approximate quantities estimate (6 marks)
- b) Discuss the sources of information for a cashflow forecast for a typical construction project. (8 marks)

QUESTION THREE

- a) What issues are considered when a contractor is undertaking the **Decision to tender** stage of the estimating process (10 marks)
- b) Discuss the typical constituents of an all in- rate for plant for the options of hiring, buying and leasing (15 marks)

QUESTION FOUR

a) Define the term **analogous rate**

(2marks)

b) A variation has been issued by the Engineer for using engineering bricks in lieu of cement common bricks in foundations. Calculate the new variation account rate, considering the following information

Bill rate for

One brick wall in cement common bricks in 1:4 cement mortar in stretcher bond- \$ 48.00 /m²

Overheads and profit at 20%

Engineering bricks cost \$300 per 1000 bricks

Common bricks cost \$200 per bricks

(10 marks)

c) Compute a material, labour and plant schedule for the following

Description	Unit	Quantity
6mm bison board ceiling fitted to and including 38x38mm sawn softwood banding at 400mm centres one way nailed to ceiling joists (elsewhere measured) and cover joints with 16x32mm wrot soft wood cover strips	m ²	75
150x150 white glazed ceramic wall tiles fixed with and including approved adhesive and pointing in white cement	m ²	150
Half brick wall in approved commons in 1:4 cement mortar built in stretcher bond, pointing and jointing as work proceeds	m ²	90
One coat 1:4 cement plaster finished smooth with a steel trowel finish to walls	m ²	95

(13 marks)

END OF EXAMINATION