

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF QUANTITY SURVEYING

CONSTRUCTION ESTIMATES AND PRICING

AQS 2205

Supplementary Examination Paper

July 2015

This examination paper consists of 2 pages

Time Allowed: 3 hours

Total Marks: 100

Examiner's Name: Mr. T Moyo

INSTRUCTIONS

1. Answer ALL questions

2. Each question carries 25 marks

REQUIREMENTS

Guide to Elemental Cost Estimating and Analysis for Building Works 1998

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4	25

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QUESTION ONE

Prepare an Elemental Estimate, for the house in Figure 1, for the following primary elements; Foundations, Ground Floor Construction and Roof. Use arbitrary rates in your computations (25 marks)

QUESTION TWO

A variation order has been given by the Architect and the following changes are required to be priced.

Original description and rate: One brick wall in facings in stretcher bond to superstructure in cement mortar (1:4) - 50m² @ \$65.00/m²

Variation order: One brick wall in common bricks in stretcher bond to superstructure in cement mortar (1:4) - 50m²

Additional information:

Face bricks- \$350.00/1000, common bricks - \$200.00/1000, cement- \$12.00/bag, sand- $$20.00/\text{ m}^3$

Productivity Outputs

Bricklaying in face brick- 30 bricks/ hour, Bricklaying in common brick- 45 bricks/ hour

Calculate the new rate for the variation. All assumptions made should be clearly stated

(25 marks)

QUESTION THREE

a) Explain the three estimating methods considered under multiple-rate approximate estimating

(15 marks)

b) Discuss the possible sources of error in construction estimates

(10 Marks)

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Discuss, with the aid of examples, the components of a Unit Rate	(25 marks)
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QUESTION FOUR