NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THEBUILT ENVIRONMENT

DEPARTMENT OF QUANTITY SURVEYING

CONSTRUCTION ESTIMATES AND PRICING

AQS 2205

Main Examination Paper

May 2016

This examination paper consists of 3pages

Time Allowed: 3 hours

Total Marks: 100

Examiner's Name: Mr. T Moyo

INSTRUCTIONS

1. Answer any one question in section A and ALLin Section B

ADDITIONAL REQUIREMENTS

1. Guide to Elemental Cost Estimating and Analysis for Building Works 2013

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	30
4	20
5	25

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SECTION A

QUESTION ONE

a) Differentiate "Net" and "Gross" pricing   (5 marks)
b) With the aid of examples, describe how an estimator can price for non-recoverable increases in a firm price tender   (10 marks)
c) Discuss the sources of information for a cashflow forecast for a typical construction projects   (10 Marks)

QUESTION TWO

a) Outline the sources of error in construction estimates   (10 Marks)
b) Describe the constituents of a typical projects overhead computation for building project

                                    (15 Marks)

SECTION B

QUESTION THREE

Prepare an Elemental Estimate, for the building in Figure 1, for the following primary elements; External Envelope, Internal Divisions and Internal Floor Finishes. Use reasonable rates in your computations
                                    (30 marks)

QUESTION FOUR

Calculate the hourly owning and operating cost for a JCB $1/4m^3$ diesel tractor excavator using the following information.

Purchase price $53 000.00

Expected life span   7 years

Scrap Value $2 500.00

The contractor is expecting 10% interest per annum on his capital outlay and he has to pay 10% per annum for taxes, $300.00 per annum insurance, approximately $760.00 for repairs and maintenance per annum and replacement of 2 sets of tyres during life span at $2800.00 per set. He also has to provide fuel at 0.45 litres per hour at $1.05 per litre, and Oil and lubricants at 10% cost of fuel. The operator for the loader is paid $5.00 per hour. The loader works an average of 36 hours per week. The working efficiency for the excavator is 85%.

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QUESTION FIVE

Compute the resources schedules for the items below

Item	Description	Unit	Quantity
1	One brick wall in commons built in stretcher bond and laid in 1:4 cement mortar	m2	50
2	One coat cement sand (1:4) plastered smooth with a wood float finish externally	m2	100

All assumptions should be clearly stated

(25 Marks)

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