



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF QUANTITY SURVEYING

CONSTRUCTION ACCOUNTING

BQS 4106

Supplementary Examination Paper

August 2024

This examination paper consists of 4 pages

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: Quantity Surveyor's Fee Scale

Examiner's Name: Dzimiri T.

INSTRUCTIONS

1. **QUESTION ONE is COMPULSORY** and answer any other three questions
2. Each question carries 25 marks
3. Use of calculators is permissible

MARK ALLOCATION

| QUESTION | MARKS |
|-----------------|--------------|
| 1. | 25 |
| 2. | 25 |
| 3. | 25 |
| 4. | 25 |
| 5. | 25 |

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QUESTION 1 (Compulsory)

Prepare Quantity Surveyor's fee note for preparation of bills of quantities using the following information-

Contract Sum \$1,080,000.00 (Including 14.5% VAT)

Contingency \$75,000.00

| Items (Extract from the BOQs) | Amount \$ |
|-------------------------------|-----------|
| Provisional Quantities | |
| Foundations | 75,000 |
| Plumbing | 32,000 |
| Reinforcement | 18,000 |
| Provisional Sums | |
| Electrical Works | 214,000 |
| Security and Alarm System | 25,000 |
| Air conditioning | 32,000 |

Re-measurement of Foundations \$87,000

Re-measurement of Plumbing \$29,500

Re-measurement of Reinforcement \$21,250

Variations- Omissions \$33,500; Additions \$54,500

Labour and material fluctuations (\$23,500)

Neks Electrical \$175,000

Safeguard Security \$33,560

Cool Air Conditioning \$25,180

Market of value of materials \$725,000.00

Additional Information

8 Copies of the BOQs were distributed

Typing at 60cents/page

Photocopying at 10cents/page

Binding \$10.00 per document

Site is 160km from the main post office

2 No. visits by Principal Quantity Surveyor and it takes 1½ hours to travel to site

The principal took 1hr on each site visit. AA Mileage rates are \$0,50 per km

Hourly principal rate is \$132.00

(25 marks)

QUESTION 2

- Describe the procedure of preparing the final account (5marks)
- Discuss the all relevant documents that are used in the preparation of a final account (20marks)

QUESTION 3

A city college project has the following details upon signing contract with winning bidder. The project is expected to be completed in 24 months

| ITEM | Amount (US\$) |
|---|---------------------|
| Demolitions | 100 000.00 |
| Preliminaries and Generals | 800 000.00 |
| 2No. Lecture room blocks @ 3000 000.00 each | 6 000 000.00 |
| Specialist services (all blocks) | 2 000 000.00 |
| Contingency sum | 200 000.00 |
| Total Tender Sum | 9 100 000.00 |

Halfway in the construction, the following was noted.

| ITEM | AMOUNT |
|----------------------------------|--------------|
| Demolition | 100% |
| Preliminaries and Generals | Calculate |
| Measured works (for all blocks) | 3 600 000.00 |
| Specialist services (all blocks) | 8 00 000.00 |
| | |

Remeasurement of Provisional Quantities

| Item | Omissions | Additions |
|---------------|-----------|------------|
| Foundations | 72 00.00 | 104 000.00 |
| Reinforcement | 22 000.00 | 28 500.00 |

Variations

| Item | Omissions | Additions |
|-------------|-----------|-----------|
| Variation 1 | 50 000.00 | 95 000.00 |
| Variation 2 | 0.00 | 45 000.00 |

Increased Costs

| | |
|--------------------------|------------|
| Main Contractor | 35 000. 00 |
| Nominated Subcontractors | 15 000.00 |

- You are informed that the last valuation No 11 was valued at \$3 600 000.00, prepare a valuation certificate no. 12 for submission to the architect (20marks)
- Explain the procedure of preparing the interim valuation (5marks).

QUESTION 4

The following information relates to Contract 87 on the Kelvin West site as at 31st December 2020-

| | |
|---|---------|
| Material delivered direct to site | 184,312 |
| Material returned to central store | 5,203 |
| Material returned to supplier | 2,657 |
| Transferred to Riverview site | 3,180 |
| Material on site 31 st December 2019 | 5,000 |
| Material on site 31 st December 2020 | 13,000 |
| Plant Purchased at cost | 150,000 |
| Plant transferred to other contracts | 4,500 |
| Direct wages | 42,156 |
| Direct expenses | |
| Paid on site | 30,000 |
| Accrued | 5,000 |
| Prepayments | 4,500 |
| Cost of work not certified | 7,000 |
| Value of work certified | 237,000 |
| Overheads incurred | 15,000 |
| Establishment charges | 70,000 |
| Progress payments received | 215,000 |
| Plant on site 31 st of December | 97,000 |

Prepare for the year ended 31st December 2020 the Contract Account for the Kelvin West site.

(25marks)

QUESTION 5

At the end of the year Apex Development has three contracts in progress as follows-

| Contract | C01 | C02 | C03 |
|-------------------------------|---------|---------|---------|
| Contract Price | 450,000 | 825,000 | 555,000 |
| Costs to Date | 105,000 | 432,000 | 462,000 |
| Estimated costs to completion | 264,000 | 288,000 | 21,000 |
| Value of work certified | 120,000 | 495,000 | 516,000 |
| Progress payments received | 102,000 | 420,750 | 438,600 |
| Cost of work certified | 84,000 | 414,000 | 450,000 |
| | | | |

- Calculate the interim profits if any that should be taken using the cost basis method on the three contracts. (15 marks)
- Describe the problems that are associated with site and contract work and how these problems can be mitigated (10 marks)