FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA SCHOOL OF ENVIRONMENTAL TECHNOLOGY DEPARTMENT OF QUANTITY SURVEYING

SECOND SEMESTER EXAMINATION 2018/2019 SESSION

COURSE CODE: QTS 523 COURSE TITLE: PROFESSIONAL PRACTICE AND ETHICS II

TIME ALLOWED 2 Hours - 3 Hours CREDIT LOAD: 3 Units

INSTRUCTION: ANSWER QUESTION 1 ANY TWO (2) QUESTIONS

Question 1

Your Professional Practicing Firm of Consultant Quantity Surveyors, *Messrs Lisafi Quantities Associates*, was commissioned by the Niger State Government (NGSG) to provide professional Quantity Surveying services for 15Nos. prototype Duplex Housing Project for its Commissioners. The estimated total cost (ETC) was \frac{1}{2}310,000,000.00 per block.

- Based on the 1996 Federal Government approved Scale of Fees for Construction Industry (see extract on Page 1), calculate the professional fees for Messrs Lisafi Quantities Associates for stages I, II and III of the project if the total construction sum (TCS) is \$\frac{1}{2}\$350,000,000.00, the cost of substructure as \$\frac{1}{2}\$20,000,000.00, and Messrs Lisafi Quantities Associates are entitled to claim for 20% of the maximum allowable reimbursable expenses.
- b) With respect to the Scope of Services for the Quantity Surveyor under the 1996 approved scale of fees for professionals in the Nigerian construction industry, explain: (i) Normal Services; (ii) Additional Services; (iii) Partial Services. 5 marks

Question 2

During the progress of works on the NGSG project highlighted in Question 1 above, Financial Statements were presented on monthly basis. Now that one of the block was completed six months ago

a) Distinguish between Financial Statements and Final Account 5 marks

b) Prepare the final account for the completed project using the following additional particulars

15 marks

Project: Construction of Duplex Housing for Commissioners by NGSG

Contractor: Messrs ABC Engineering Construction Ltd.

Commencement date: 14 January 2018
Original completion date: 9 August 2018
Final Completion date: 4 January 2019
Original contract sum: N310,000,000.00

Contingency sum: №10,000,000.00 VAT (5%): №15,500,000.00

PC Sums in the BoQ:

Final Subcontract sum:

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LAN Installations	₹16,000,000.00	№ 21,(00.000,000
Lift Installations	₩14,000,000.00	¥19,0	00,000,000
HVAC installation	s №12,500,000.00	₩14,5	00,000.00

Suppose that the LAN Installations was executed by the main contractor and that the main contractors profit and attendance on subcontracts are 5% and 2.5% respectively.

Provisional sums (PSs) in the BoQ:

Actual expenditure on PSs

Additional foundations	₩3,300,000.00	₩6,000,000.00
Entrance canopy	₩3,200,000.00	₩5,500,000.00
Steel burglar proof	₩1,500,000.00	₩3,500,000.00
External works	₩35,000,000.00	₩42,000,000.00

Re-measurement of provisional quantities

	Bills of Quantities	Re-measurement
1. Substructure	₩30,000,000.00	₩38,000,000.00
2. Staircase balustrading	₩1,600,000.00	₩3,296,518.00
Fluctuations: ₹5,100,000,00: A	approved loss and expense c	laim: N6 000 000 00

Question 3

a) Prepare interim valuation no.9 for the project with the following data:

Project: Proposed Office Development	t for Messrs Algebraic Ventures Ltd.
Contract sum:	№2,150,000,000.00
Completion Period:	60 weeks

Commencement date: October 2, 2017
Completion date: November 30, 2018

Retention: 10%

Retention limit: 4% of Contract sum

Period of interim valuation: Monthly

Advance payment made to the main contractor: N322,500,000.00

Recovery of advance payment: Nine equal instalments beginning

from 2nd valuation

Total value of preliminaries in the contract: №135,000,000.00

VAT: 5%

Date on site: June 30, 2018

MEASURED WORK

Element

Value of work executed

Substructure

₩310,500,000.00

Frame ,	74,500,000.00
Upper Floor	84,500,000.00
Staircases	16,500,000.00
Roof	72,000,000.00
Internal and External Walls	52,500,000.00
Doors and Windows	2,800,000.00
Fittings and fixtures	2,500,000.00
Wall finishes	22,500,000.00
Floor finishes	2,500,000.00
Ceiling finishes	4,500,000.00
External works	35,800,000.00

Values of works executed by Nominated subcontractors:

1.	Local Area Networking	₩33,500,000.00
2.	HVAC System	₩36,500,000.00
3.	Lift Installations	₩24,000,000.00

Value of Nominated Suppliers work:

1. Aluminium Doors and windows	₩22,750,000.00
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The Supplier of aluminium doors and windows has completed his work and the Architect has so certified.

Profit on nominated subcontractors and suppliers works:	5%
Attendance on nominated subcontractors:	2.5%
Architect Instructions (net addition)	₩23,750,000.00
Fluctuations (assessed by traditional method)	₩ 3,500,000.00 (net addition)
Approved loss and expenses Claims	¥ 2,750,000.00
Statutory fees paid by the Contractor	₩ 2,000,000.00
Amount previously certified (Valuation Nr.8)	¥785,000,000.00

Materials on site:

Cement 1200 bags @ №2,600.00

Steel reinforcement bars 10ton @ №225,000.00

Coarse Aggregate 125m3 @ №6,000.00

Sharp Sand 130m3 @ N3,000.00

Ceramic Tiles 1200m2 @ №4,000.00/m2

10marks

c) Outline three (3) methods of valuing preliminaries under a construction contract

3 marks

d) List three (3) items each that are subject to retention and four (4) items that are not subject to retention during valuation of works under a construction contract

7 marks

Question 4

a) The importance of ethical consideration in the discharge of professional services cannot be overemphasized. Outline five (5) of the ethical principles published by the International Ethical Standards Coalition.

5 marks

- b) Briefly discuss five (5) common examples of misconduct prevalent in the construction industry 10 marks
- c) Outline and describe various categories and types of Certificates used in the course of executing building contracts.

 5 marks

The Scale of fees for Quantity Surveyors where the Architect, Mechanical, Electrical or Structural Engineer is the Prime Consultant is as follows:

Cost of Project	Fees payable as a percentage of cost of project
Up to 5 million	2.75%
Next 10 million or part thereof	2.50%
Next 15 million or part thereof	2.30%
Next 45 million or part thereof	2.00%
Next 75 million or part thereof	1.75%
Next 150 million or part thereof	1.40%
Next 200 million or part thereof	1.00%
Balance over 500 million	0.80%

Number of repetitions	Fees payable as a percentage of cos of project
Initial Project	100%
1 - 10 Repetitions	30%
11 – 20 Repetitions	20%
21 - 50 Repetitions	15%
51 - 100 Repetitions	12.50%
101 - 250 Repetitions	10%

OK.