

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF BUSINESS AND ECONOMICS UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH IT $2^{\rm RD}~\rm YEAR~2^{\rm ND}~\rm SEMESTER~2019/2020~\rm ACADEMIC~\rm YEAR$

**COURSE CODE: ABA 209** 

**COURSE TITLE: Cost Accounting** 

EXAM VENUE: STREAM: (BBA)

DATE: EXAM SESSION:

TIME: 2 HOURS

## **Instructions:**

- 1. Answer ALL questions in section A and ANY other 2 questions in section B
- 2. Candidates are advised not to write on the question paper.
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room

#### **QUESTION ONE**

Empire limited manufactures a chemical product that passes through two processes X and Y. On 1<sup>st</sup> December 20X7 work in progress consisted of the following:

	Process X	Process Y
	2,000 units	6,000 Units
	Sh	sh
Direct materials	1,000,000	3,400,000
Direct Labour	400,000	760,000
Overheads	600,000	1,200,000

In both processes, the goods were 100% complete as to direct materials and 75% complete as to direct labour and overheads. In the same month, the following additional costs were incurred:

	Process X	Process Y
	Sh	Sh
Direct materials	1,940,000	
Indirect materials		560,000
Direct labour	728,000	2,240,000
Overheads	1,080,000	4,200,000

The direct material added in process X were made up of 5,000 units valued at Sh. 388 per unit. Normal loss in process X was estimated at 10% of production. The normal loss was due to evaporation and so nothing of value could be realized from it.

At the end of the month, 4,000 units were passed from process X to process Y, while 800 units remained in progress; 100% complete as to direct materials and 50% complete as to labour and overheads. On the same date, 9,800 units were passed from process Y to finished goods while 600 remained in progress 100% complete as to materials and 50% as to labour and overheads. Normal loss was estimated to be 5% of the inputs. Unit loss could be disposed at Sh.500 per unit. All inventories are valued on the weighted average cost basis.

# Required

The cost per unit for process X and Y. (30 Marks)

# **QUESTION TWO**

a) From the following information, prepare a cost statement clearly showing the various components of the cost of production. (20 Marks)

	Shs
Stocks on 1st January 20X7:	
Raw materials	48,000
Work in progress	9,800
Finished goods	120,000
Wages paid to the factory workers	148,000
Factory insurance	52,000
Plant balance on 1st January 20X7	400,000
Factory rent	180,000
Cleaning costs	200,000
Purchases of raw materials	350,000
Stocks at 31 <sup>st</sup> December 20X7	
Raw materials	21,000
Work in progress	8,000
Carriage on raw materials	42,000
Returns of raw materials to suppliers	6,200
Salary of marketing manager	200,000
Fixed administration expenses	140,000
Salesmen commission	60,000

### **Additional information**

- 1. Out of the wages paid to the factory workers, 90% is considered direct while the remaining 10% is indirect.
- 2. Cleaning costs should be apportioned as follows: 70% to the factory, 20% to the warehouse and 10% to the office.
- 3. Depreciation on plant should be provided at the rate of 20% of the plant balance on 1<sup>st</sup> January 20X7
- 4. Factory rent accrued at 31st December 20X7 was Sh 120,000
- **b**) Given the information in (a) above, determine the total cost per unit and the selling price per unit assuming:
  - i) The business needs to make a profit of 20% on cost; and
  - ii) The firm produced 1,000 units

#### **QUESTION THREE**

The following details have been obtained from the records of Dymesworth ltd, a firm dealing with graphic design.

Week	Number of design produced	Total costs incurred
1	310	23,200
2	200	19,500
3	600	23,600
4	480	20,220
5	400	23,600

6	440	18,480
7	440	16,200
8	330	20,200

#### Required

- i) Using the regression analysis method; fit an appropriate equation that relates the number of design produced with the total costs incurred.
- ii) Use the cost equation derived in (i) above to predict the total costs that would be incurred if 456 designs were produced in the 9<sup>th</sup> week.
- iii) Explain the difficulties that would be encountered if the high-low method were to be used to compute the cost equation of this firm.

#### **QUESTION FOUR**

- a) List at least five factors that determine or influence the stock levels in a business organization. (5 Marks)
- b) Migwena blanket manufacturers ltd has the following information (15 Marks)

Annual consumption: 600,000 units

Usage: Maximum 15,000 units per week

Minimum 9,000 units per week

Lead time: Maximum 9 weeks

Minimum 5 weeks

Reorder quantity: 120,000 units

Buffer stock: 60,000 units

Ordering cost: sh. 50 per order

Inventory: Beginning 3,000,000 units

Ending 3,600,000 units

Warehouse costs per annum Sh. 264,000

#### Required:

Compute the following inventory related levels and costs. (20 Marks)

- a) Reorder level
- b) Maximum level
- c) Minimum level
- d) Holding cost per unit
- e) EOQ

## **QUESTION FIVE**

- a) Discuss the characteristics of a good cost accounting system. (5 marks)
- **b)** State five assumptions of marginal costing (5 marks)
- c) Discuss the procedure followed in the procurement of materials for use in an organization. (10 marks)

(Total 20 Marks)