MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF COMMERCE

UNIVERSITY ORDINARY EXAMINATION

2021/2022 ACADEMIC YEAR

FIRST YEAR **FIRST** SEMESTER EXAMINATION FOR MASTERS IN BUSINESS ADMINISTRATION

BCA 601– MANAGEMENT ACCOUNTING

DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer Any Four questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

QUESTION ONE (25 MARKS)

Dylan Ltd manufactures belts and braces. The firm is organised into five departments namely Belt, Brace, and three service departments maintenance, stores and administration. Direct costs are accumulated for each department. Production overheads are apportioned to departments on the basis of floor area. Service department costs are apportioned on the basis of estimated usage, measured as the percentage of the labour hours operated in the service department utilized by the user department. Each service department also services other service departments. Data for the year ending 31December 2020 is as follows;

Details	Belts	Brace	Admin	Main	Stores
Sales in units	150,000	60,000			
Output in units	100,000	50,000			
Direct material cost(sh)	120,000	130,000	-	20,000	30,000
Direct wages(sh)	80,000	70,000	50,000	80,000	20,000
Floor area(%)	40	40	5	10	5
Usage of service department(% labour hours)					
Admin	40	40	-	10	10
Main	30	30	-	-	40
Stores	50	25	-	25	-

The total production overheads amounted to sh1,000,000 for the year.

Required:

a) Calculate the total cost per unit of belts and braces respectively. (10marks)

b) Opportunity costs and sunk costs are among the concepts of cost commonly discussed.
   i. Suggest for each of them situations in which the concept might be applied.(4marks)
   ii. Assess briefly the significance of each of these concepts. (4marks)

c) Discuss the extent to which the application of learning curve theory can help an organisation to prolong the life cycle of its products. (7marks)

QUESTION TWO (25 MARKS)

Moonlite Construction Company is currently engaged in a contract which commenced 18 months ago and remains unfinished. The following information relating to work on the contract has been prepared for the year just ended.

Contract price	21,000,000
Work certified	18,400,000
Cost of work not certified	350,000
Material on site (physical stock)(beg)	100,000
Material delivered to site	5,120,000
Wages	6,370,000
Hire of plant	1,460,000
Other expenses	1,240,000
Material on site (physical stock) end	180,000

As soon as materials are delivered to the site, they are charged to the contract account. A record is also kept of materials as they are actually used on the contract. Periodically a stock check is made and any discrepancy between book stock and physical stock is absorbed back into each contract at a rate of 1% of material booked. The stock check at the end of the year revealed a stock shortage of sh40, 000. In addition to the direct costs general overheads are charged to contracts at 5% of value of work certified.

Required:

a) Explain Five features distinguishing contract costing from other costing methods. (10marks)
b) Determine the profitability of the above contract and recommend how much profit should be taken for the year just ended. (10marks)

c) Tech Ltd has its own photocopying department. The photocopying costs include costs of machines, operators, papers, toner and utilities. The following data has been recorded for the last 6 months.

Month	Number of copies	Total costs(sh)
January	11,500	102,000
February	12,000	104,000
March	12,500	106,000
April	13,000	108,000
May	13,500	111,000
June	14,000	113,000

Required:

Formulate a predictor equation to estimate the total cost of photocopying 15,000 copies using simple linear regression method. (5marks)

QUESTION THREE (25 MARKS)

Excel division is part of super group. It produces a basic fabric which is then converted in other divisions within the group. The fabric is also produced in other divisions within the super group and a limited quantity can be purchased from outside the group. The fabric is currently charged by Excel division at total actual cost plus 20% mark up.

a) Explain why the transfer pricing method used by Excel division is unlikely to lead to:
   i. Maximization of group profit. (3marks)
   ii. Effective divisional performance measurement. (3marks)

b) Mudell Ltd manufactures a product it sells directly to retailers. One of its department has a production capacity of 80,000 units per month. Currently the company has excess capacity which has resulted from liquidation of one of its major customers. For the next quarter production and sales volume is expected to be 50,000 units. The expected costs and revenue per unit are as follows

	Shs.
Direct material	70
Direct wages	100
Variable production overheads	16
Fixed production overheads	60
Sales & distribution costs	24
Selling price	320

Additional information

1. Mudell Ltd is expecting an upsurge in demand and considers that the excess capacity is temporary
2. Piuto Ltd has offered to buy 2,000 units per month for the next three months at a price of Sh200 per unit.
3. Piuto Ltd would collect their orded products thus no sales and distribution costs.
4. No subsequent sales to Piuto Ltd are anticipated.

Required:

i. Advice Mudell Ltd whether to accept or reject the order. (6marks)

ii. Discuss Four factors that the company should consider before accepting or rejecting the offer. (8marks)

c) Discuss Five functions of a budget committee. (5marks)

QUESTION FOUR (25 MARKS)

a) Rebeca Ltd operates a standard costing and in respect of one of its products which is manufactured within a single cost centre, the following information is given.

For one unit of product the standard material input is 16 litres at a standard price of sh.2.50 per litre. The standard wage rate is sh5 per hour and 6 hours are allowed in which to produce one unit. Fixed production overhead is absorbed at the rate of 120 percent of direct wages.

During the last month:

The actual price paid for material was sh.2.45 per litre

Total direct wages was sh121,500 Fixed production overhead incurred was sh150,000

Variances	Favourable	Adverse
Material price	8,000	
Material Usage		6,000
Labour rate		4,500
Labour efficiency	3,600	
Fixed overhead expenditure		6,000

Required:

i. Budgeted output in units. (2marks)

ii. Number of litres purchased. (2marks)

iii. Number of litres used above the standard allowed. (2marks)

iv. Actual units produced. (2marks)

v. Actual hours worked. (2marks)

b) Discuss Five ways in which variance analysis help management to control a business. (10marks)

c) A balanced score card is a listing of all key objectives to work towards. Discuss the advantages and disadvantages of using a balanced score card. (5marks)

QUESTION FIVE (25 MARKS)

a) Windway Ltd manufactures a product which passes through 3 processes A, B and C. For the first week of October actual data included:

	Process A	Process B	Process C
Material	600,000	300,000	200,000
Labour	500,000	400,000	500,000
Direct expenses	100,000	20,000	80,000
Overheads	60,000	50,000	40,000

20,000 units have been issued to process A at a cost of sh10 per unit. The output and normal loss was:

	A	B	C
Output	19,500	18,800	16,000
Normal loss	2%	5%	10%

Required:

i. Prepare process accounts. (12marks)

b) You are the Management accountant of a group of companies and your managing director has asked you to explore the possibilities of introducing a zero based budgeting system. You are required to prepare notes for a paper for submission to the board of directors that sets out.

i. How the zero base budgeting would work within the company. (4marks)

ii. What advantages it might offer over the existing system. (4marks)

iii. What problems might be faced in introducing a zero base budgeting. (5marks)