



MACHAKOS UNIVERSITY

University Examinations for 2022/2023 Academic Year

SCHOOL OF BUSINESS, ECONOMICS AND HOSPITALITY AND TOURISM
MANAGEMENT

DEPARTMENT OF BUSINESS ADMINISTRATION AND FINANCE

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF COMMERCE (FINANCE OPTION)

BAC 404: COST ACCOUNTING II

DATE:

TIME:

INSTRUCTIONS

- Answer question one and any other two questions.
- Marks allocated for each question are shown at the end of the question.
- Show your working where necessary.

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Juhudi Limited maintains separate cost and financial ledgers. The accountant has provided the opening trial balance in the cost ledger.

Cost Ledger opening trial balance		
	Sh.	Sh.
Financial ledger control account	-	249,520
Work – in – Progress (WIP) control account	125,210	
Finished goods control account	85,150	
Stores ledger control account	39,160	
	<u>249,520</u>	<u>249,520</u>

The following information was obtained from the financial accounts:

- During the period, total sales amounted to Sh. 375,290.
- Total purchases, wages and overheads totaled to Sh.292,860
- At the end of the period, the stores ledger and WIP control accounts had the same value as in the opening trial balance above.
- The closing balance on the financial ledger control account was Sh. 212,420

Required:

- The profit for the period as per the financial accounts. (4 marks)
- Closing trial balance. (3 marks)

b) In the year 2022 VIP incurred the following expenses to maintain 1500 lecturers.

Details	Sh.
Administration expenses (40% Variable)	4,000,000
Lecturing pay (60% variable)	8,000,000
Airtime allowance (fixed)	1,000,000
Sundry expenses (50% fixed)	500,000
Refreshments allowance	300,000

Required;-

- a) Using accounts analysis method, express an equation in the form $y = a + b$ (4 marks)
- b) Using the equation expressed above, estimate the total cost of 2000 lecturers to be employed in 2023. (2 marks)
- c) Deltex Ltd uses a part branded “Mimi” whose demand tends to be constant at an annual rate of 4.4 million units. The cost per unit for this part is sh. 220 and the cost of placing an order is sh. 550.

Required:

- i) Compute the Economic Order Quantity (EOQ) (3 marks)
- ii) Compute the annual number of orders. (2 marks)
- d) The following direct costs were incurred on job no. 678 of Standard TV Company.

Materials Sh. 40,200

Wages: Dept A: 60 hours @ Sh. 30 per hour

Dept B: 40 hours @ Sh. 20 per hour

Dept C: 20 hours @ Sh. 50 per hour

Overhead expenses were estimated as follows:

Variable overheads:

Dept A: Sh. 50,000 for 5,000 labor hours

Dept B: Sh. 30,000 for 1,500 labor hours

Dept C: Sh. 20,000 for 500 labor hours

Fixed overheads amounted to Sh. 2,400

Variable Overheads are absorbed on the basis of direct labor hours.

Required: Calculate

- i) Total cost of job no. 678 (8 marks)
- ii) Selling price to give a margin of 25%. (4 marks)

QUESTION TWO (20 MARKS)

Tinn Limited produces a detergent which pass through two processes namely mixing and refining to completion. The following data relate to the refining process for the month of October 2022.

Opening stock (WIP)	50,000 units	
Cost of opening stock:	Sh.	Stage of completion (%)
Materials	1,000,000	100
Labour	250,000	40
Overheads	600,000	40

During the month 200,000 units at a cost of Sh. 42 per unit were passed from the mixing to the refining process. Costs incurred during the month were;

	Sh.
Labour	1250,000
Overheads	1,081,000
Other materials	453,000

At the end of the month 210,000 units had been completed and passed to finished goods while 40,000 units were still in the process having reached the following stages:

Materials	100%
Labour	60%
Overheads	60%

Required: Using First in First out (FIFO), Prepare;

- Statement of Equivalent units (6 marks)
- Statement of cost (5 marks)
- Statement of valuation (4 marks)
- Refining process account (5 marks)

QUESTION THREE (20 MARKS)

The information given below relates to Wasp Ltd. which manufactures a single type of chemical. Overhead processing costs for the last thirteen accounting months (of four weeks each) have been as follows;

Period	Overhead cost Sh. "000"	Output Sh. "000"
1	770	120
2	820	150
3	810	160
4	830	170
5	960	200
6	900	170
7	940	200
8	950	200
9	940	180
10	870	160
11	800	140
12	820	150
13	790	140

Required:

- Establish the cost function in the form of $Y = a + bX$ using the regression analysis method. (17 marks)
- Using the equation established above, determine the total overhead cost of producing 350 units. (3 marks)

QUESTION FOUR (20 MARKS)

The West Africa Industries Limited buys crude vegetable oil. The refining of these oils results in four products A, B and C which are liquids and D which is a heavy residue. The cost of the crude oil in 2019 was Sh.1,104,000 and the refining department incurred total processing costs of Sh. 2,800,000. The output and sales for the four products in 2019 were as follows:-

Product	Output (Litres)	Sales (Sh.)	Additional Processing
A	2,000,000	4,600,000	1,200,000
B	40,000	400,000	240,000
C	20,000	160,000	None
D	36,000	1,200,000	40,000

Required:

- Assume that the net realizable value of allocating joint costs is used, what is the net income for products A, B, C and D? Joint cost total was Sh. 3,904,000. (10 marks)

- (b) The company has been tempted to sell at split-off directly to other processors. If the alternative had been selected, sales per litre would have been A, Sh. 1.50, B Sh. 5, C Sh. 8 and D Sh.30. What would be the net income for each product under this alternative?
(10 marks)

QUESTION FIVE (20 MARKS)

- a) The net profit of Pine Limited a manufacturing concern for the year ended 30 September, 2019 as shown by the financial accounts amounted to Sh. 357,510. The cost accounts for the same period disclosed a net profit of Sh. 344,800. On examination of both sets of accounts the following facts were discovered.

Sh.

Production overheads under- recovered in cost accounts	6,240
Administrative overheads over – recovered in in cost accounts	3,400
Depreciation charged in financial accounts	22,400
Depreciation recovered in cost accounts	25,000
Interest on investments not included in cost accounts	16,000
Obsolescence loss charged in financial accounts	11,400
Income tax provided for in financial accounts	80,600
Bank interest and dividends received in financial accounts	2, 450
Loss due to depreciation in stock value charged in financial accounts	13,500

Required:

- a) reconciliation statement between the net profit as per cost accounts and as per financial accounts. (14 marks)
- b) Explain THREE features of Job Costing. (6 marks)