## Eastern University, Sri Lanka

## **Faculty of Commerce and Management**

# Third Year First Semester Examination in Bachelor of Commerce Honours in Accounting and Finance - 2021/2022 (February/March 2024)

#### (Proper/Repeat)

## **DAF 3083 Advanced Cost Accounting**

No. of Questions: 05

No. of Pages: 07

Time: 3:00 Hours

Calculators are permitted
Answer All Questions

firm. Discuss.

01. (I) Do you agree that installing Cost Accounting System is always advantageous for th

(05 Marks

(II) A Shoemakers Company found that their production costs for the 2023 accounting year had been as follows:

Direct wages	Rs. 8,000,000
Direct material cost	Rs. 5,000,000
Direct expenses	Rs. 1,500,000
Production overhead cost	Rs. 2,400,000
Total shoe manufactured	160,000 units
Machine time used	10,000 hours
Direct Labour time used	40,000 hours

500 pairs of shoes were produced during the first two weeks of the year as a single job, which had a direct wages cost of Rs.8,000, direct material cost of Rs.5,000 and direct expenses of Rs. 1,500. The company apportions fixed overhead cost using the percentage rate on direct wages and charges administrative expenses and selling expenses at the rate of 15% and 10%, respectively, of production cost.

## Required:

- a) Production and total cost of producing 500 pairs of shoes.
- b) Cost per pairs of shoes.
- c) Suppose there is a special order for 1,000 pairs of shoes for the price of Rs. 40. Do you accept this order?

(10 Marks)

(III) The data regarding inventory of a company are given below. About 50 items are required every day for a machine. A fixed cost of Rs. 800 per order is incurred for placing an

order. The inventory carrying cost per item amounts to Rs. 0.02 per day. The comwill be function for 360 days in a year.

- a. Calculate Economic Order Quantity.
- a. Suppose the purchasing officer says that if we order 2500 units at a time, we go discount from the supplier. Price per unit is Rs. 500. Comments the new prowhether to accept or not.
- b. If lead-time is 50 days, find re-order level.

(05 M

(Total: 20 M

- 02. (I) Briefly differentiate between Average Costing and Specific Order Costing approx (05 M
  - (II) Ragul started brick industry. The following information is given regarding a brid industry.

Start up capital of Rs. 500,000 of which Rs. 400,000 obtained from 15% bank low Lease payment for Land of Rs. 120,000 per year which is used for clay extraction Annual license fee Rs. 20,000 for brick industry have to be paid for municipal on Clay transport Rs. 8,000 paid for 5,000 bricks.

Firewood cost of Rs. 30,000 and its transport cost is Rs. 12,000 for 15,000 brick Labour Charges

Molding - Rs. 2 per brick

Drying - Rs. 2 per brick

Making kiln (layering) for burning bricks - Rs. 3,000 for every 2,000 brid

Burning of bricks - Rs. 10000 for every 5,000 bricks

Unloading bricks from kiln Rs. 2,000 for 6,000 bricks

Transport charges for bricks (burned) - Rs. 20,000 paid for 15000 bricks Salesperson commission is Rs. 1 per bricks.

Penalty payment for delay in payment of License fee Rs. 20,000

Due to flood Rs. 12,000 worth of clay damaged which cannot be used for brick productions.

The purchased firewood of Rs. 5,000 were burnout without using for brick prod It is estimated that 6% of normal loss incurred for breakages of bricks, unburned etc.

Required

a) Based on the information classify costs using different basis.

(05)

b) Identify any costs in the above information, which are not usually considered in cost calculations.

(02 Marks)

c) Calculate cost per bricks if bricks can be produced as Batches of 10000, 15000 and 20000 bricks.

(08 Marks)

(Total: 20 Marks)

03. (I). Explain the difference between marginal costing and absorption costing approach.

(04 Marks)

(II). Ayothi Industry manufactures and sells a single product X. The following budgeted and actual information is provided in relation to the production of this product:

Selling price per unit

- Rs. 50.00

Direct materials per unit

-Rs. 8.00

Direct labour per unit

- Rs. 5.00

Variable production overheads per unit

-Rs. 3.00

During the months of April and May 2023 - Production is 500 and 380 units and Sales is 300 and 500 units respectively. Fixed production overheads are budgeted at Rs. 4,000 per month and are absorbed on a unit basis. The normal level of production is budgeted at 400 units per month.

Other costs incurred: Fixed selling - Rs. 4,000 per month, Fixed Administration - Rs. 2,000 per month. Variable sales commission was 5% of sales revenue.

There was no opening inventory of the Product at the start of April.

Calculate the closing inventory value as per marginal costing and absorption costing for the month of May 2023.

(03 Marks)

(III). AB company Ltd. has three divisions each of which makes a different product. The budgeted data in Rs. for the next year is as follows:

Divisions	A	В	С
Sales	112,000	56,000	84,000
Direct material	14,000	7,000	14,000
Direct labor	5,600	7,000	22,400
Variable overhead	14,000	7,000	28,000
Fixed cost	28,000	14,000	28,000
Total cost	61,600	35,000	92,400

The management is considering closing down division C. There is no possil reducing variable costs. Advice whether division C should be closed down.

(04)

(IV). Cost data for last year:

Sales - Rs. 6,000,000 (Operating at 75% capacity)

Marginal cost (50% of sale) - Rs. 3,000,000

Contribution - Rs. 3,000,000

Profit - Rs. 1,000,000

Percentage of profit over sales - 16.7%

A report on the performance for the year states:

Sales - 8,000,000

Profit - 1,600,000

Percentage on profit on sale - 20%

#### Calculate

- a) Fixed cost
- b) Profit when capacity occupied at 100%.

Catal, 15

(04]

(Total: 15

- 04. (I). What do you understand by the term "Integrated Accounting" and what advanta it offer compared to separate systems of cost accounting and financial account (05)
  - (II). Shankar Ltd is a manufacturing a product through two processes. Information period ended 31 July 2023 is as follows:

Process 1	Process 2
	300 kg of
-	Rs. 13,000
Rs. 25,650	-
Rs. 12,750	Rs. 6950
Rs. 5,950	Rs. 3475
700 kg	-
	800 kg
200kg	150kg
	Rs. 25,650 Rs. 12,750 Rs. 5,950 700 kg

Normal losses are expected to be 5% of input for each process. Losses in Process 1 have no scrap value, whilst losses in Process 2 can be sold for Rs. 10 per kg. Losses are deemed to arise at the end of the process.

Opening WIP is 40% complete with regard to Labour and Overheads. Closing WIP in Process 1 is 100% complete with regard to Material and 50% complete for Labour and Overheads. Closing WIP in Process 2 is 50% complete with regard to Labour and Overheads.

Prepare the Process Accounts for each process and necessary accounts and calculate cost per kg at each process.

(12 Marks)

(III). A private bus owner Mr. Nanayakara have 2 buses, he provides passenger transport services between Batticaloa and Colombo.

Distance between Batticaloa and Colombo is 320 kms.

Bus operated one trip per day, on the next day it retunes.

All buses operated for 25 days in a month.

He purchases the buses for Rs. 8,000,000 each.

Estimated life of the bus 10 years.

Residual value of the bus at end of eight years Rs 1,200,000 each bus.

Each bus have capacity of 50 Seats and capacity occupied 70%.

Each bus has 6 tires, a tire price is Rs. 110,000. Each tire can be used for 100,000 km.

Insurance Rs. 200,000 per bus per year

Wages for conductor Rs 3,000 per day. One conductor assigned for a bus.

Wages for driver Rs 5000 per day. Two drivers for a bus.

Garage rent - Rs. 50,000 at Colombo and Rs. 10,000 at Batticaloa per month.

Distance between garage and bus stand is 5 km.

Maintenance charge Rs. 150,000 every six month per bus.

Fuel charges 80 liters per bus per trip

Ticket printing cost Rs. 8,500 per bus per month

Annual License fee Rs 50,000 per bus

Annual painting charge Rs 180,000

## Required:

- a) Total cost for the month.
- b) Break Even Point.
- c) Cost of a passenger km.

d) Assume that the bus owner planned to earn 40% margin on takings, bus passenger who travel from (i.) Batticaloa to Harbarna - 140 kms (ii.) Batticaloa Colombo.

(Total: 1

- Explain how standard costing techniques can be used to enhance the efficient 05. (I). firm.
  - $(\Pi).$ The standard quantity of material required is 4 kgs. per unit of actual of relevant figures are as under:

Material	A	В	С	D
Standard mix	30%	40%	20%	10%
Price per kg. (Rs.)	1.25	1.50	3.50	3.00
Actual qty. used (Kg.)	1,180	1,580	830	440
Actual price per kg. (Rs)	1.30	1.80	3.40	3.00

Actual output: 1,000 units

Calculate price variance, mix variance, usage variance and total material cost

SteelWorks Corporation makes a single product - a fire resistant comme (III).cabinet - that it sells to office furniture distributors. The company has a si system that it uses for internal decision making. The company has two departments whose costs are listed below:

Manufacturing overhead

Rs. 600,000

Selling and administrative overhead Rs. 400,000

Total overhead costs

Rs. 1,000,000

The company's activity-based costing system has the following activity cor activity measures:

**Activity Cost Pool** 

**Activity Measures** 

Assembling units

Number of units

Processing orders

Number of orders

Supporting customers

Number of customers

Other

Not applicable

Costs assigned to the "other" activity cost pool have no activity measure; they consist of the costs of unused capacity and organization-sustaining costs - neither of which are assigned to products, orders or customers.

The Corporation distributes the costs of manufacturing overhead and of selling and administrative overhead to the activity cost pools based on employee interviews, the results of which are reported below:

Distribution of Resource Consumption Across Activity Cost Pools

	Assembling	Processing	Supporting	Other	Total
	Units	Orders	Customers		
Manufacturing overhead	40%	30%	10%	20%	100%
Selling and administrative overhead	10%	50%	25%	15%	100%
Total activity	2,000 units	300 orders	200 customers	us .	-

### Required:

- a) Allocate overhead costs to the activity cost pools.
- b) Compute activity rates for the activity cost pools.
- c) OfficeMart is one of the Corporation's customers. Last year OfficeMart ordered filing cabinets four different times. OfficeMart ordered a total of 120 cabinets during the year. Construct a table showing the overhead costs of these 120 units of four orders.

(10 Marks)

(Total: 20 Marks)