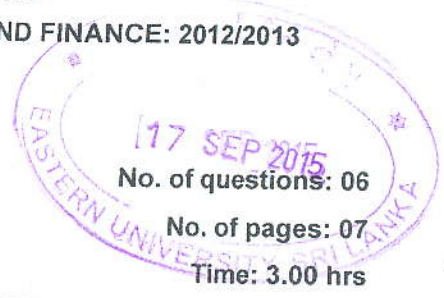


EASTERN UNIVERSITY, SRI LANKA
FACULTY OF COMMERCE AND MANAGEMENT
THIRD YEAR SECOND SEMESTER EXAMINATION

IN BACHLOR OF COMMERCE SPECIALISATION IN ACCOUNTING AND FINANCE: 2012/2013

(July 2015) PROPER

DAF 3024 ADVANCED COST ACCOUNTING



Calculators are permitted

Answer all questions

01. A management of a company wants to analyse cost using absorption costing method and activity-based costing method for the product manufactured by the company. Presently the company produces 4 type of product. The relevant information are given below.

Product	Z1	M23	B3	AX2
Output in units	165	240	285	210
Direct cost per unit (Rs.)				
Direct material (Rs.)	70	60	95	45
Direct labour	25	28	42	55
Machine hours required per unit	4	3	5	6

The four products are similar in production process. Therefore, to produce 30 units requires one production run for each product type and each product is sold in batches of 15 units. The production overhead is currently absorbed by using a machine hour rate, and the total of the production overhead for the period has been analyzed as follows;

Details of activities	Cost (Rs.)
Machine department costs (rent, business rates, depreciation and supervision)	50400
Set-ups cost	15500
Stores receiving	14400
Inspection/Quality control	10850
Material handling and dispatch	8680
Total	99830

Cost drivers were identified for each type of activities.

Activities	Cost driver
Machine department costs	machine hours
Set-ups cost	number of production runs
Stores receiving	requisition raised
Inspection/Quality control	number of production runs
Material handling and dispatch	orders executed

Each product type requires 30 requisitions. Total number of orders executed is 62, in which for every 15 units of output one order is placed.

Required:

- Total cost for each product if all overhead cost are absorbed
- Total cost for each product using activity based costing
- Show the differences in unit cost in (a.) and (b.) and comments the implication on pricing and profit.

(Total: 15 Marks)

02. A transport company operates fleet of passenger buses during the year 2014. The bus service was inter-city and semi luxury service. The company operates six buses which travel from Ampara to Colombo, covers distance between the cities is 350km and assume each bus makes one round trip in a day.

The company purchases the buses at the cost of Rs.5200000, Rs.3800000, Rs.4200000, Rs.4700000, Rs.5000000 and Rs.5300000.

Wages for 12 drivers at Rs.60000 each per month.

Wages for 12 cleaners at Rs.30000 each per month.

Interest on capital 4% per annum.

Rent of six garages Rs.3500 each per month at Colombo and Rs.1000 at Ampara.

Director's fees Rs.50000 per month.

Office establishment Rs.7500 per month.

License and taxes Rs.6000 per bus every year.

Realisation by sale of old tyres and tubes at Rs.12500 every quarter.

Depreciation to be charge for the vehicles at 18% per annum on cost.

Annual repairs, maintenance and spare parts was 75% of depreciation.

The transport service is executed 30 days in a month.

Seating capacity of buses is 50, and generally 85% of capacity was occupied.

Required:

- Find appropriate cost unit for the transport company

- b. Calculate cost per cost unit
- c. Suppose company decided to earn 25% of profit on cost, calculate bus fare per to be fixed for a passenger who travel from Ampara to Colombo.

(Total: 15 Marks)

03. (i) Multimake Limited produces and sells three types of equipment for which the following information is available.

Standard cost and selling prices per unit

Product	Omni wave (Rs)	Mnoa (Rs)	Sams (Rs)
Materials	70	110	155
Manufacturing labour	40	55	70
Installation labour	24	32	44
Variable overhead	16	20	28
Selling price	250	320	460

Fixed cost for the period is Rs. 450000 and the installation labour, which is highly skilled, is available for 25 000 hours only in a period and is paid Rs 8 per hour. Both manufacturing and installation labour are variable costs.

The maximum demand for the product is:

Omni wave	Mnoa	Sams
2000 units	3000 units	1800 units

Required:

- a. Calculate the shortfall (if any) in hours of installation labour.
- b. Determine the best production plan, assuming that the company wishes to maximize profit.
- c. Calculate the maximum profit that could be achieved from the plan in part (b) above.
- d. The company can overcome the labour shortage by offering Rs 12 per hour, additional installation labour would become available, advice management in this regard.

(15 Marks)

- (ii) XY Limited makes three components: A, B and C. The following costs have been recorded:

Particulars	Component A Unit cost (Rs)	Component B Unit cost (Rs)	Component C Unit Cost (Rs)
Variable cost	30.00	80.00	52.00
Fixed cost	45.00	85.00	38.00
Total cost	75.00	165.00	90.00

Another company has offered to supply the components to the company at the following prices.

Particulars	Component A	Component B	Component C
Price each	Rs 45.00	Rs 72.00	Rs 57.50

Which component(s), if any, should XY Limited consider buying in?

(05 Marks)

(Total: 20 Marks)

04. (i) On 31st March, 2014, the following balances were extracted from the books AB Company:

	Debit	Credit
	Rs.	Rs.
Stores Ledger Control A/c	52500	
Work-in-progress Control A/c	47000	
Finished Goods Control A/c	37500	
Cost Ledger Control A/c		<u>3</u> 147000

The following transactions took place in April 2014.

Raw materials:	Rs.
Purchased	142500
Returned to suppliers	4500
Issued to production	147000
Returned to stores	4500
Productive wages	60000
Indirect Labour	37500
Factory overheads expenses incurred	75000
Selling and administrative expenses	60000
Cost of finished goods transferred to warehouse	319500
Cost of Goods sold	315000
Sales	450000

Factory overheads are applied to production at 160% of direct wages, any under/over absorbed overhead being carried forward for adjustment in the subsequent months. All administrative and selling expenses are treated as period costs and charged off to the Profit and Loss Account of the month in which they are incurred. Show the following Accounts:

- a. Cost Ledger Control Account
- b. Factory Over head Control Account
- c. Stores Ledger Control Account
- d. Costing Profit and Loss Account
- e. Work-in-progress Control Account
- f. Finished Goods Stock Control Account

(14 Marks)

- (ii) The profits disclosed by cost books and financial books were Rs. 73436 and Rs. 70158 respectively. The causes for differences in these profit figures have been ascertained under:

	Rs.
Factory overhead under – recovered in costing	6270
Administration overhead recovered in excess	4675
Depreciation charged in financial books	4026
Depreciation recovered in costing	4345
Interest received but not included in costing	495
Income tax provided in financial books	660
Bank interest credited in financial books	253
Stores adjustment (credited in financial books)	462
Depreciation of stock charged in financial accounts	946
Dividends appropriate in financial accounts	1320
Loss due to theft & pilferage provided only in financial a/c	286

Required:

Prepare a profit reconciliation statement.

(06 Marks)

(Total: 20 Marks)

05. A company manufactures a product by two processes. Information for the period ended 31 July 2014 is as follows:

	Process 1	Process 2
Opening WIP	Nil	200kg
Costs for the period:		
Material 1000kg costing	Rs.25650	Nil

Labour	Rs.12750	Rs.6950
Overheads	Rs.5950	Rs.3475
Transferred to Process 2	700kg	-
Transferred to Finished Goods	-	800kg
Closing WIP	200kg	150kg

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 60% 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.

Required:

Prepare the Process Accounts and relevant accounts for each process.

(Total: 15 Marks)

06. The standard cost of a certain chemical mixture is:

Material P - 40% at Rs. 20 per tonne

Material Q - 60% at Rs. 30 per tonne

A standard loss of 10% as expected in production. During a period there is used :

90 tonnes material P at the cost of Rs. 18 per tonne; 110 tonnes material Q at the cost of Rs. 35 per tonne.

The weight produced is 182 tonnes of good production.

Required:

- Material cost variance
- Material price variance
- Material mix variance and
- Material yield variance.

(06 Marks)

The following figures have been extracted from the cost books of a factory for the month of January 2014.

	Standard	Actual
Number of units produced	30,000	32,000
Capacity	100%	100%
Number of days worked	25	26

Variable overheads	Rs. 60,000	Rs. 63,000
Fixed overheads	Rs. 90,000	Rs. 93,000

Required:

Analyze the total overhead variance in to:

- Expenditure and
- Efficiency variances.

(03 Marks)

(iii) The following details are available from the records of ABC Ltd. engaged in manufacturing article M for the week ended 30th June. The standard labour hours and rates of payments per article M were as follows:

Particulars	Hours	Rate per Hours (Rs)	Total (Rs)
Skill Labour	10	3.00	30
Semi- skill Labour	08	1.50	12
Unskilled Labour	16	1.00	16
			58

The actual production was 1,000 articles M for which the actual hours worked and rates are given below:

Particulars	Hours	Rate per Hours (Rs)	Total (Rs)
Skill Labour	9,000	4.00	36,000
Semi- skill labour	8,400	1.50	12,600
Unskilled Labour	20,000	0.90	18,000
			66,600

Required:

- Labour cost variance
- Labour rate variance
- Labour efficiency variance and
- Labour mix variance

(06 Marks)

(Total: 15 Marks)