



EASTERN UNIVERSITY, SRI LANKA
FACULTY OF COMMERCE AND MANAGEMENT
THIRD YEAR SECOND SEMESTER EXAMINATION
IN BACHLOR OF COMMERCE SPECIALISATION IN ACCOUNTING AND FINANCE: 2009/2010
(August 2011) PROPER
DAF 3024 ADVANCED COST ACCOUNTING

No. of questions: 05

No. of pages: 08

Time: 3.00 hrs

Calculators are permitted

Answer all questions

01. (i) "In the age of competition, managers need to be conscious on cost in order to ensuring their survival and improve profitability."
- a. Explain the differences between Cost Control and Cost Reduction process.
- b. List out the tools which are used to reduce cost of product or service in an organization? (05 Marks)
- (ii) The following information shows monthly machine hours and electricity costs for a manufacturing industry during 2010.

Month	Machine Hours	Electricity Costs
January	6250	24000
February	6300	24200
March	6350	24350
April	6400	24600
May	6300	24400
June	6200	24300
July	6100	23900
August	6050	23600
September	6150	23950
October	6250	24100
November	6350	24400
December	6450	24700
Total	75150	290500

Separate fixed cost and variable cost using high low method.

(04 Marks)

(iii) Medicals Ltd produces a vitamin pill. The demand for the product is 5000 cases per month. The set up cost associated with the production is Rs.1500 and the inventory holding cost is Rs.2 per case per month. Production plant capacity is 10000 per month. Find the following.

- Optimal production lot size.
- Length of inventory cycle.
- Number of days per month during which production occurs. **(06 Marks)**

(iv) LMT Ltd manufactures an equipment of M. The company received an order for 2000 units of equipment from large establishment at a price of Rs.3 per unit. The company sells this type of equipment to its other customers at a price of Rs.5 per unit but it has surplus capacity and can take the special order without adversely affecting its regular operations for the coming month.

The income statement of the company for the previous month is shown below.

	Rs.	Rs.
Net sales (10000 units @ Rs.5 each)		50000
Less: Costs		
Direct Material (Rs.1.50 per unit)	15000	
Direct Labour (Rs.1.00 per unit)	10000	
Factory Overhead	10000	
Selling and Administration overhead	10000	45000
Net Profit		<u>5000</u>

Direct material and direct labour costs to be incurred on the special order are estimated to be same amount per unit as for the regular business. Special tools costing Rs.500 would be required to meet the specifications of the special order.

- Prepare differential cost statement for deciding about the acceptance of the order.
- What other qualitative factors that you would consider when accepting special order. **(08 Marks)**

(Total: 23 Marks)

02. (i) MM Transport Limited operates a small fleet of delivery vehicles. Standard costs have been established as follows:

Loading (same as for unloading)	2 hour per ton loaded
Loading costs:	
Labour (casual)	Rs. 100 per hour
Equipment depreciation	Rs. 225 per week
Supervision for loading	Rs. 2100 per week

Drivers' wages (fixed)	Rs. 5000 per man per week
Fuel	Rs. 10.50 per mile
Repairs	Rs. 20 per mile
Depreciation	Rs. 300 per week per vehicle
Supervision	Rs. 2800 per week
Other general expenses (fixed)	Rs. 1200 per week

There are two drivers and two vehicles in the fleet. During a slack week, only 6 journeys were made. The vehicles were loaded as follows.

Journey	Tons carried (one way)	One-way distance of journey miles
1	7	150
2	8	40
3	5	160
4	6	120
5	7	50
6	8	80
Total	41	600

Required to calculate:

- Total cost incurred for the week.
 - Total ton-miles travelled
 - Average cost per ton-mile for the week.
- (09 Marks)
- (ii) A consultant wants to know the impact of labour turn over on the profit of a particular firm during the last year of 2010. The following information were given:

Sales during the year	Rs.7500000
PV Ratio was	30%
Actual Hours worked by workers	280000hrs

The personal department delays in recruiting new employees which causes to loss potential working hours of 100000hrs. The actual direct labour hours included 30000 hours attributable to training of new recruits which was considered as unproductive direct labour hours. The following cost incurred consequent to labour turnover.

Settlement cost due to leaving	Rs.55000
Recruitment Cost	Rs.44000
Selection cost	Rs.32000
Training cost	Rs.62000

Assuming that the potential production lost due to labour turnover could have been

sold at prevailing prices. Based on the above context calculate the cost incurred due labour turnover. (06 Marks)

(iii) The following particulars are extracted from the records of the company.

	Product A	Product B
Selling price (per unit)	Rs.100	Rs.120
Consumption of material	2 Kg.	3 Kg
Material cost	Rs.10	Rs.15
Direct wages	Rs,15	Rs.10
Direct expenses	Rs.5	Rs.6
Machine hours used	3	2
Overhead expenses:		
Fixed	Rs,5	Rs.10
Variable	Rs,15	Rs.20
Direct wages per hour	Rs.5	

- a. Comment on the profitability of each product (both use of same material) when:
1. Total sales potentials in units is limited
 2. Raw material is in short supply; and
 3. Production capacity (in terms of machine hours) is the limiting factor.
- b. Assuming raw material as the key factor, availability of which is 10000 kg and maximum sales potential of each product being 3500 units, find out the production mix which will yield the maximum profit. (08 Marks)

(Total: 23 Marks)

03. (i) On 31st March, 2010, the following balances were extracted from the books Supreme Manufacturing Company:

	Debit	Credit
	Rs.	Rs.
Stores Ledger Control A/c	35000	
Work-in-progress Control A/c	38000	
Finished Goods Control A/c	25000	
Cost Ledger Control A/c		98000
	98000	98000

The following transactions took place in April 2010.

Raw materials:	Rs.
Purchased	95000
Returned to suppliers	3000
Issued to production	98000

Returned to stores	3000
Productive wages	40000
Indirect Labour	25000
Factory overheads expenses incurred	50000
Selling and administrative expenses	40000
Cost of finished goods transferred to warehouse	213000
Cost of Goods sold	210000
Sales	300000

Factory overheads are applied to production at 150% 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

(12 Marks)

- (ii) The profits disclosed by cost books and financial books were Rs.17000 and Rs. 17800 respectively. The causes for differences in these profit figures have been ascertained under:

	Rs.
Over-recovery of administration overheads in cost accounts	2000
Loss due to obsolescence charged in financial accounts	6000
Depreciation charged in cost books	2400
Depreciation charged in financial accounts	1600
Loss due to depreciation in stock value	400
Interest on investment received	8000
Income-tax paid	1000
Bank interest received	1000
Stock adjustment (credit in financial books)	400
Works overhead under-recovered in cost accounting	4000

Prepare a profit reconciliation statement.

(06 Marks)

(Total: 18 Marks)

04. (i) RST Limited produces three products X, Y, and Z. it provide the following information.

	X	Y	Z
Output in units	5000	15000	22500
Direct material per unit	Rs.100	Rs.180	Rs.60
Direct labour per unit	Rs.60	Rs.80	Rs.100
Machine hour per unit	4	4	7
Labour hour per unit	3	4	5
No. of machine set ups	130	120	150
No. of purchase requisitions	600	900	1000

production overhead split by departments:

Department A	Rs.550000 – it is labour intensive
Department B	Rs.750000 – it is machine intensive
Total hours in Department A – 55000	
Total hours in Department B – 150000	

Production overhead split by activity.

Ordering/receiving of material	Rs.700000
Machine set-up	Rs.600000
No. of order placed/received	2500 orders
No. of Machine set-up	400 set-ups

You are required to:

- Prepare a statement of cost under: Traditional method and ABC method.
 - Comment on the comparative results **(12 Marks)**
- (ii) A worker is paid Rs.100 per hour and 5 days working week contains 45 hours. Time allowed daily for approved absence from his place work, maintenance of machine etc. is 12 minutes and his job card shown that his time chargeable during the week to various is as follows.

Job No. 115	21 hours
Job No. 119	12 hours
Job No. 210	07 hours
Total	40 hours

The unaccounted time is caused by a power failure.

- Calculate total wages payable to the worker.
- Calculate normal and abnormal idle time and its cost.
- How would you treat these idle time cost? **(04 Marks)**

(Total: 16 Marks)

05. (i) Chemical Industry produces a product M which passes three stages of production process. The following information was given pertaining to the month of March, 2011.

1. Opening work in progress 5000 units

Material: 100% completion	Rs.20000
Labour: 60% completion	Rs. 7500
Overhead: 60% completion.	Rs.3000
2. Units introduced into the process 17500 units.
3. 17500 units are transferred to next process.
4. Process cost for the period are:

Material	Rs.250000
Labour	Rs.192500
Overhead	Rs.97000
5. The stage of completion of closing WIP is estimated to be:
Material 100%, Labour 50%, and Overhead 50%.

You are required to:

- a. Prepare a statement of equivalent units of production using average cost method and compute the cost of finished out and closing stock.
- b. Prepare process account

(09 Marks)

(ii) Harish manufacturing Limited produces one product, and the entire product is sold as soon as it is produced. There are no opening or closing stocks and work in progress is negligible. The company operates a standard costing system and analysis of variances is made every month. The standard cost for the product is given below.

		Rs.
Direct materials	0.5 Kg at Rs.4.00 per Kg	2.00
Direct wages	2 hours at Rs.2.00 per hour	4.00
Variable Overhead	2 hours at Rs.0.30 per hour	0.60
Fixed Overhead	2 hours at Rs.3.70 per hour	7.40
Standard cost		14.00
Standard profit		6.00
Standard selling price		20.00

Budgeted output for the month of December 2010 was 5100 units.

Actual results for the December 2010 were as follows.

Production of 4850 units was sold for Rs.95600

Material consumed in production amounted to 2300 Kg at a total cost of Rs.9800

Labour hours paid for amounted to 8000 hours at a cost of Rs.16800

Variable overheads amounted to Rs.2600

Fixed overhead amounted to 42300

You are required to:

- a. Calculate all necessary variances based on available information.
- b. Prepare a statement to reconcile budgeted profit with actual profit.

(11 Marks)

(Total: 20 Marks)