EASTERN UNIVERSITY, SRI LANKA

FACULTY OF COMMERCE AND MANAGEMENT

SPECIAL EXAMINATION IN BBA/ B.COM 2008/2009 & 2009/2010 (FEB/MAR 2011)

(Proper/Special Repeat)

DAF 3114 COST ACCOUNTING

No. of questions: 05

No. of pages: 06

Time: 3.00 hrs

Calculators are permitted

Answer all questions

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01. (i) "Cost Accounting is an indispensable tool of modern management" Discuss.
(04 Marks)

(ii) Briefly describe of behavioral based classification of cost. Explain the meaning of term used under this classification. (03 Marks)

(iii) LM enterprises manufacture a special product 'X'. The following were collected

Re order Period	:	4 – 6 weeks
Maximum Consumption	:	400 units per week
Normal Consumption	:	300 units per week
Minimum Consumption	:	250 units per week
Re order quantity	:	1500

Calculate;

a. Re order level
b. Maximum level
c. Minimum level
d. Average Stock level

(04 Marks)

(iv) The data regarding inventory of a company are given that about 100 items are required every day for a machine. A fixed cost of Rs. 500 per order is incurred for placing an order. The inventory carrying cost per item amounts to Rs. 0.4 per day. Compute economic order quantity (EOQ). (03 Marks)

(v) The following is a summery of the receipts and issue of material in a factory during January 2011.

January	01	-	Opening balance 300 units @ Rs.30 per unit
	10	-	Received from supplier 200 units @ Rs. 35 per unit
	12	-	Issue 320 units
	20	-	Received from supplier 100 units @ Rs. 40 per unit
	25	-	Issue 180 units

This revealed that on the 27th there was a shortage of five units. Prepare the stores ledger accounts using First in First Out (FIFO) method of pricing issues. (03 Marks)

(vi) The following information were extracted from the Books of Accounts of Ram industry.

Material	A	B
Opening stock	Rs.32000	Rs.78000
Purchase	Rs468000	Rs.672000
Closing stock	Rs.20000	Rs.50000

Calculate the material turnover ratio of the above material and state which of the materials is more faster moving.. **(03 Marks)**

(Total: 20 Marks)

02. (i) Mr. X work in a factory where the following particulars are available:

1. Normal rate per hour is Rs. 60
2. Normal piece rate per hour is 20% more of time rate
3. Expected output is 20 units per hour
4. Mr. X produced 180 units in 8 hours a day

Calculate his wages for the day on;

a. Time rate basis
b. Piece rate basis **(06 Marks)**

(ii) AB. Ltd has three production departments X,Y and Z and two service departments A and B. The following estimated figures for certain period have been made available.

Rent and rates	Rs. 20000	Power	Rs.6000
Lighting and electricity	Rs. 2400	Depreciation of machinery	Rs.40000
Indirect wages	Rs. 6000	Other expenses	Rs.40000

Following are further details which are also available

	Total	X	Y	Z	A	B
Floor space (Sq. mts.)	10000	2000	2500	3000	2000	500
Light points (Nos.)	120	20	30	40	20	10
Direct wages (Rs.)	20000	6000	4000	6000	3000	1000
Horse power of machines	300	120	60	100	20	-
Cost of machinery (Rs.)	100000	24000	32000	40000	2000	2000
Working hours		4670	3020	3050	-	-

The expenses of the service departments of A and B are to be allocated as follows (use repeated distribution or simultaneous method)

Service departments	X	Y	Z	A	B
A	20%	30%	40%	-	10%
B	30%	20%	30%	20%	-

You are required:

1. Calculate the over head absorption rate per hour in respect of three production departments.
2. What will be the total cost of an article with material cost of Rs. 80 and direct labour cost of Rs. 40 which passes through X,Y and Z departments for 2, 3 and 4 hours respectively. **(14 Marks)**

(Total: 20 Marks)

03. (i) A contractor undertook a contract of Rs. 500000 on 1st of January 2010. The retention money agreed is 20% and the contractee is to make payment for 80% of the work certified by the Engineer. The following are the details as shown in the books on 31st December, 2010.

Material sent to site from stores	Rs. 30,200
Materials purchased directly from vendor	Rs. 45,500
Materials received from other contract	Rs. 20,300
Labour engaged	Rs. 1,35,000
Direct Expenses	Rs. 42,000
Plant installed at site	Rs. 40,000
General Expenses	Rs. 32,000
Establishment charges	Rs. 18,000
Wages accrued on 31/12/2010	Rs. 12,000
Direct charges accrued on 31/12/2010	Rs. 3,000
General charges accrued on 31/12/2010	Rs. 5,000
Material return to stores	Rs. 15,000
Material at site on 31/12/2010	Rs.13,000
Material transferred to other contracts	Rs. 11,000
Material sold (Costing Rs. 8,000)	Rs. 9,000
Plant sold (costing Rs. 15,000)	Rs. 10,000
Material destroyed by fire	Rs. 8,000
Work not certified	Rs. 75,000
Work certified by Engineer	Rs. 2,00,000
Cash received from contractee	Rs. 1,60,000

You are required to prepare contract account for the year ended 31st December 2010. **(08 Marks)**

(ii) Ceylon sugar industry has provided the following cost information of process I relating to product Z for a period of June 2007 is as follows.

1. Opening work in progress 6000 units @ Rs. 4 per unit

   Degree of completion

Material	-	100%
Labour	-	50%

2. During the period the following cost were incurred

Material (input)	18000 units at	Rs. 111200
Labour		Rs. 35920

3. Closing work in progress 1600 units

   Degree of completion

Material	-	75%
Labour	-	60%

4. Unit transferred 18000 units
5. Normal loss 10% of total input (opening work in progress plus units put in during the period)
6. Scrap value Rs. 2.00 per unit

Required:

1. The statement of equivalent units production using FIFO method
2. Process I account **(12 Mark)**

(Total: 20 Marks)

04. (i) The following information has been obtained from the costing records of a manufacturing concern in respect of Job No. 1156 ;

Materials Rs 8500

Wages Department	A	-	120 Hrs @ Rs 3 per hour
	B	-	80 Hrs @ Rs 5 per hour
	C	-	40 Hrs @ Rs 8 per hour

Variable overhead estimated :

Department	A	-	Rs 16,000 for 4,000 direct labour hour
	B	-	Rs 6,000 for 3,000 direct labour hour
	C	-	Rs 3,000 for 1,000 direct labour hour

Fixed overhead (estimated Rs 50,000 for 1,000 normal working hours)

Calculate cost of Job No. 1156 and fixed out the price to be charged so as to earn a profit of 25% on selling price. **(06 Marks)**

(ii) XY industry provides the following information from their records

The standard material and labour requirement for producing 100 Kg of product X is as follows.

Material	105 Kg @ Rs. 10 per Kg
Labour	5 hours @ Rs. 25 per hour

During the month of February, 1500 Kg were produced. The actual consumption of material and labour was as under.

Material	1725 kg @ Rs. 9 per Kg
Labour	90 hours @ Rs. 30 per hour

Calculate:

a. Material cost variance

b. Labour cost variance **(07 Marks)**

(iii) Zhara transport service is running 5 buses between two places 30 miles apart. Seating capacity of each bus is 50 passengers. The following particulars were obtained from the books of March 2007.

Administrative expenses	Rs. 25000
Insurance	Rs. 19500
Rent	Rs. 3500
Driver wage per hour	Rs. 100
Cost of fuel per mile	Rs. 10
Repairs and maintenance per mile	Rs. 1.5
Vehicle runs 20 miles per hour	

Actual passenger carried were 80% of seating capacity. Each bus make one round trip per day. And all the buses run 20 days of month. Calculate

a. Total passenger-mile for the month

b. Cost per passenger-mile

(07 Marks)

(Total: 20 Marks)

05. (i) From the following figures, prepare a Reconciliation statement

	Rs.
Net loss as per costing records	172,400
Net loss as per financial records	208,045
Work overhead under recovered in costing	3,120
Administrative overhead recovered in excess	1,700
Depreciation charged in financial records	11,200
Depreciation recovered in costing	12,500
Interest received not included in costing	8,000
Obsolescence (loss) charged in financial records	5,700
Income – tax provided in financial books	40,300
Bank interest credited in financial books	750
Stores adjustment (credit) in financial books	475
Value of opening stock in:	
Cost accounts	52,600
Financial books	54,000
Value of closing stock in:	
Cost accounts	52,000
Financial accounts	49,600
Interest charged in cost accounts but not in financial accounts	6,000
Preliminary expenses written off in financial accounts	800
Provision for doubtful debts in financial accounts	150

(05 Marks)

(ii) A company, manufacturing two products, furnishes the following data for a year

Product	Annual Output (units)	Total machine (hours)	Total number of purchase orders	Total Number Of set- ups
A	5,000	20,000	160	20
B	60,000	120,000	384	44

The annual overheads are as under	Rs.
Volume related activity costs	550,000
Set – up related costs	820,000
Purchase related costs	618,000

You are required to calculate the cost per unit of each product A & B bases on Activity Based Costing method.

(09 Marks)

(iii) Delta industry uses a special component, which would be purchased from out side firm. The company estimated that 40000 components are required per year. The following unit cost has to be incurred if a component is manufactured by the company.

Direct material:	Rs. 12.00
Direct labor:	Rs. 14.50
Variable overhead:	Rs. 5.75
Fixed over head:	Rs. 6.75
Total	Rs. 39.00

The fixed overhead rate is absorbed on the basis of direct labour hour. The component could be purchased for Rs. 35.00 each from the outside supplier.

a. As a cost accountant suggest to the management whether component should be purchased or manufactured.

b. What other factors should the company consider before finalising whether to purchase or manufacture the component? **(06 Marks)**

(Total: 20 Marks)