EASTERN UNIVERSITY, SRI LANKA

FACULTY OF COMMERCE AND MANAGEMENT

THIRD YEAR FIRST SEMESTER EXAMINATION IN B.B.A

2005/06 (AUGUST 2007)

DAF 3113 - COST ACCOUNTING

ANSWER ALL QUESTIONS **TIME: 3.00 HOURS**

01.

i. What is cost accounting? Differentiate it from financial accounting? **(04 marks)**

ii. Briefly describe of behavioral based classification of cost. Explain the meaning of different costs come under this classification. **(03 marks)**

iii. Prepare store ledger account for the month of April, 2007 from the following transaction relating to the receipt and issue of materials on the basis of FIFO method.

April	01	Opening balance 500 units @Rs. 20 per unit
	07	Received from suppliers 300 units @Rs. 25 per unit
	14	Issued 400 units
	18	Issued 200 units
	24	Received from suppliers 400 units @Rs. 30 per unit

On 28 of April, stock taking reveals that there was a shortage of 10 units. **(04 marks)**

iv. AB Ltd. manufacture a product and the following particulars are collected for the year ended 31st December 2006.

Minimum usage	500 units per week
Maximum usage	200 units per week
Reorder period	4 – 6 weeks
Reorder quantity	1000 units
Reorder level	3000 units

Find maximum and minimum level **(03 marks)**

v. A factory buys a product at Rs. 10 per product. Annual requirement is 2000 units. Carrying cost of inventory is 10% p.a and ordering cost is Rs.40 per order.

a. Calculate EOQ **(03 marks)**

b. Suppose, the purchasing officer says that if we order 2000 units at a time, we get 3% discount from the supplier. Comments the new proposal whether to accept or not. **(02 marks)**

vi. During 2006, the factory received an order for a Job No: 2168. It is estimated that the required direct materials was Rs. 85000 and direct labour was Rs. 65000. Other information as follows.

1. Machine A used for 65 hours; the machine hour rate is Rs. 5
2. Machine B used for 45 hours; the machine hour rates is Rs. 4

Other expenditures of the concern during the period was to Rs. 370000 for 20000 normal working hours.

You are required to calculate the cost of Job: 2168 and price to give 25% on selling price.

(04 marks)

vii. 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 200 units in 8 hours a day

Calculate his wages for the day on;

- **a.** Time rate basis
- **b.** Piece rate basis

(04 marks)

viii. During the month of April 2007, two worker of A and B produced 1800 units and 2200 units respectively. The standard production per month per worker is 2000 units. The piece rate is paid at Rs. 1.00 per unit. In addition production bonus is Rs. 25 paid for each percentage of actual production exceeding 80% over standard production. Further monthly dearness payment of fixed Rs. 2000 was paid to each worker. Calculate the **monthly** payment for each worker.

(04 marks)

ix. 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-km for the month
- **b.** cost per passenger-km

(05 marks)

x. 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

(04 marks)

(Total: 40 marks)

02.

i. List out the different type of overhead distribution bases and give the reason for it. **(02 marks)**

ii. Brandix Ltd has three production departments of P_1, P_2, and P_3 and has three service departments of office, store and workshop. The following particulars are available for the year ending 31-12-2006.

Item	Total	Production department			Service department		
		P_1	P_2	P_3	Office	store	workshop
Direct wages	75000	20000	25000	30000	-	-	-
Direct materials	110000	30000	35000	40000	-	-	-
Indirect material	13000	2000	3000	3000	1000	2000	2000
Indirect wages	35000	3000	3000	4000	10000	10000	5000
Area in sq. meters	1250	200	250	300	150	100	250
Book value of machinery	105000	30000	35000	25000	-	-	15000
Horse power of machineries	65	15	20	25	-	-	5
Machine hours worked	50000	10000	20000	15000	-	-	5000

Common expenses incurred for the period as follows.

Rent	Rs. 12500
Insurance for machinery	Rs. 1050
Depreciation	15% of the value of machinery
Power	Rs. 3900
Light	Rs. 1250

The expenses of service department are to be allocated in the following manner

Service departments	**Basis**
office	Direct wages
store	Direct material
workshop	Machine hours

You are required to calculate overhead absorption rate per hour in respect of three production department. **(14 marks)**

(Total: 16 marks)

03.

i.

a. Briefly state the features of process costing? **(02 marks)**

b. 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 marks)

ii. A contractor undertakes a contract of Rs. 1000000 on 1st of January 2006. The contractee agreeing to pay 80% of work certified. During the year the following amounts were spent;

Material	Rs. 200000
Labour	Rs. 125000
Plant	Rs. 150000
Other expenses	Rs. 30000

The following data also shown in the books on 31 - 12 - 2006.

Material at site on 31-12-2006	Rs. 30000
Pant at site on 31-12-2006	Rs. 70000
Plant sold (Costing Rs. 50000)	Rs. 40000
Material destroyed by fire	Rs. 15000
Cash received (being the 80% of work certified)	Rs. 480000
Work not certified	Rs. 40000

Prepare contract account. **(06 marks)**

(Total: 20 marks)

04.

i.

a. State the differences between marginal costing and absorption costing? **(02 marks)**

b. Briefly describe the usages of break even analysis? **(02 marks)**

c. ROCL Ltd produces three products. The following information is given for the current year.

Product	**A**	**B**	**C**
Selling price per unit in Rs.	200	150	200
c/s ratio (%)	20%	20%	30%
Maximum sales potential in units	10000	8000	18000
Raw material required in units (@ Rs. 2.00 per unit)	4	5	5

The fixed expenses are estimated Rs. 300000. The company uses a single raw material in all three products. During the current year, the raw material is in short supply with the value of Rs. 300000 for manufacture and meets sales demand.

You are required to set product mix which will give a maximum profit keeping the short supply of raw materials in view. **(07 marks)**

ii. 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?

(07 marks)

iii. Ram & Co makes a single product. The following information is obtained for the budgeted year 2007.

Direct material cost per unit	Rs. 6
Direct labour cost per unit	Rs. 3

Variable over head	Rs. 3
Selling price per unit	Rs. 27
Fixed cost for the year	Rs. 60000

Calculate

a. Break even point in quantity and Rs.

b. Sales to earn target profit of Rs. 150000

c. Margin of safety at the sales level of 7000 units **(06 marks)**

(Total: 24 marks)