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Eastern University, Sri Lanka

**EASTERN UNIVERSITY, SRI LANKA**  
**FACULTY OF COMMERCE AND MANAGEMENT**  
**PART II EXAMINATION IN BBA/COM 98/99 (OCT/ NOV 2000)**

**BBA 301 MANAGERIAL ACCOUNTING**

Time: 03 Hours  
Answer All questions

01. i. ABC Company Ltd is currently using full absorption costing. The company manufactures three products named X, Y, and Z. Each product has to pass through two production departments (cutting department and the machining and finishing department). Both departments are labour intensive as the basis for absorption of overhead labour hours are used. The budgeted overhead costs for the coming year are,

	Rs.
Power	119,200
Sales commission	60,000
Light and heat (factory)	92,400
Depreciation on equipment	125,000
Repairs to factory equipment	35,000
Delivery charges	43,400
Advertising	30,000
Supervisory staff costs (factory)	109,200
Canteen expenses (used by all staff)	78,720

The following data upon which an appropriate basis of apportionment can be determined.

	Cutting department	Machining and finishing department	Administrative and sales department
Labour force (including supervisory)	40	100	40
Floor space (sq. meters)	8000	10000	4000
Book value of equipment	Rs. 160000	Rs. 840000	-
Machine hours	50000	150000	-
Supervisory staff	02	10	-

Labour hours per producing one units.

	Cutting department	Machining and finishing department
X	0.6	3.5
Y	0.5	2.9
Z	0.4	2.4

Each labour works 1800 hours per year.

- i. You are required to calculate;
- Overheads absorption ratio for allocating overheads cost in each department? (09 Marks)
  - Total overhead cost allocated for each production? (06 Marks)

- ii. Explain the reasons and methods of allocating overheads cost in services departments among the production departments? (05 Marks)
- Total 20 Marks)

02. Rajah Company Ltd. manufactures a single product. The standard cost card for this product is as follows.

X – 8 Kg at Rs. 0.80 per Kg	6.40	
Y – 4 Kg at Rs. 1.40 per Kg	<u>5.60</u>	12.00
Direct Labour – 3 hours at Rs. 5.00		15.00
Variable production overhead – 3 hours at Rs. 1.00		3.00
Fixed production overhead – 3 hours at Rs. 4.00		12.00
		<u>42.00</u>
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The standard sales price per unit is Rs. 50.00. The budgeted production and sales for the period were 3000 units, and the budgeted fixed production overhead (from which the fixed cost per unit was derived) was Rs. 36,000. Budgeted Administration, selling and distribution overheads of Rs. 10,000 are excluded from standard cost.

Actual result for the period were.

Sales and production	2800 units
Sales revenue	Rs. 145,600
Direct material purchased	
X – 20,000 Kg Cost Rs. 15,000	Material used 24,100 Kg
Y – 14,000 Kg Cost Rs. 21,000	Material used 10,100 Kg
Direct labour 8600 hours	Cost Rs. 47,300
Variable production overhead	Rs. 8,200
Fixed production overhead	Rs. 36,900
Ad. selling and distribution overhead	Rs. 10,400

All stocks are valued at standard cost.

- You are required to calculate;
- i.
    - a. Material Variances
    - b. Labour Variances
    - c. Overhead Variances
    - d. Sales Variances
  - ii. Prepare reconciliation of budgeted and actual project. (18 marks)

(02 Marks)  
(Total 20 Marks)

03. i. During its financial year ended 31.12.1999 'THAYAA' Company Ltd, an engineering company, has worked on several contracts. Information relating to one of them is given below.

Contract S. 1235	
Data commenced	01.01.1999
Estimated completion data	31.03.2000
Contract price	Rs. 120,000
Work certified as satisfactory completed (and invoiced) up to 31.12.1999	Rs. 90,000
Amount received from contractee	Rs. 75,000

<b>Cost up to 31.12.1999</b>	<b>Rs.</b>
Wages	45,500
Material sent to site	18,000
Other contract cost	9,000
Proportion of head office cost	3,000

Plant and equipment transferred to the site Rs.4,500 (at book value on 01.01.1999)

The plant and equipment is expected to have a book value of about Rs. 500 when the contract is completed.

Stock of materials at site on 31.12.1999 is Rs. 1500. Expected additional costs to complete the contract are,

Wages	Rs. 5000
Materials (including stock at 31.12.1999)	Rs. 6000
Other (including head office costs)	Rs. 4000

At December 1999 it is estimated that work to a cost value of Rs. 9500 has been completed, but not included in the certification.

If the contract is completed one month earlier than originally scheduled, an extra Rs. 5000 will be paid to the contractor. At the end of December 1999 there seemed to be a good change that this would happen.

You are required to;

- a. To show the amount for the contract in the books of 'THAYAA' Company Ltd up to 31.12.1999 (including any transfer to the profit and loss account, which you think is appropriate) and the personal account of the contractee.

(14 Marks)

b. To show how the work in progress would be displayed on the balance sheet.

(02 Marks)

ii. Explain how the profits are determined in the case of uncompleted contracts?  
(04 marks)

(Total 20 Marks)

04. The details of the process A and B are as follows.

	Process A	Process B
Opening work in progress	12000 units, 3/5 converted, consisting of material Rs. 48,000 and conversion cost Rs. 30,600	4000 units 4/5 converted, consisting of previous process cost of Rs. 61,200, materials Rs. 8000 and conversion costs Rs. 25,600
Units started during the period	32,000 units	36,000 units
Closing work in progress	8000 units 3/4 complete	16000 units 1/2 complete
Material cost added during the period	Rs. 128,000	Rs. 40,000
Conversion cost added during the Period	Rs. 150,000	Rs. 172,800

Material is introduced at the start of process A, and additional material is added to process B when the process is 70% complete. Conversion costs are applied uniformly throughout both process. The completed production of process A are immediately transferred to process B and completed production of process B is transferred to finished goods stock.

There are no losses in process A, and 3200 units of normal loss and 800 units of Abnormal loss in process B. Losses are detected upon completion. Lost units have a scrap value of Rs. 2.00 per unit.

Assume that the company adopts weighted average method.

Prepare

a. Production cost statements

(14 Marks)

b. Process Accounts

(06 Marks)

(Total 20 Marks)

- 85
05. i. What are the differences between the accountant's and economist's views of managerial costs. (04 marks)

- ii. Chithra Company Ltd. manufactures three products X, Y and Z. Standard selling prices and costs have been established for 2001 as follows.

	Per Unit		
	X (Rs.)	Y (Rs.)	Z (Rs.)
Selling price	<u>30</u>	<u>60</u>	<u>125</u>
Direct materials	08	15	20
Direct wages	10	20	50
Variable overheads	06	10	25
	<u>06</u>	<u>10</u>	<u>25</u>

Direct wages are paid at the rate of Rs. 2/- per unit, in each case. Fixed overheads are budgeted at Rs. 250,000 for the coming year.

In the short term the company cannot increase its direct labour force and as a result 325,000 direct labour hours will be available in the coming year. The company has commitments to produce 5000 units of each product.

It has been suggested that after meeting the maximum requirements for X, Y and Z, the balance of available direct labour hours shall be used to produce Z.

- a. Prepare an incomes statement showing the expected results if the proposal is adopted. (04 Marks)
- b. Comment on the statement you have prepared in (a) and prepare an income statement for any alternative policy which you consider would be more profitable? (04 Marks)
- c. Basing your calculations on your suggestions in (b) show the Company's break-even point in units and sales value? (04 Marks)
- d. Show the sale value which is required to produce an after tax return of 10% on the capital employed of Rs. 01 million assuming a taxation rate of 35%. (04 Marks)
- (Total 20 Marks)