## EASTERN UNIVERSITY, SRI LANKA

## Faculty of Commerce and Management

## Part II Examination in Bachelor of Business Administration 1999/ <br> 2000

## (April 2006) (EXTERNAL)

BBA 301 Managerial Accounting

Answer all five (5) questions
Time: 03 hours

Q1. (a) Explain the difference between the contribution margin per unit and the contribution margin ratio.
(03 marks)
(b) List out three major limitations of break-even analysis.
(c) A company manufactures a special product. The following information indicates some future changes in its cost structure.
An increase in labour wage of $12 \%$ from next year.
The company also anticipates an increase in the price of raw material by $20 \%$ of its imported component which is $60 \%$ of the total raw material cost. Variable overhead is expected to increase by $8 \%$

Their plant capacity is 30,000 units per annum. Your are also given the following information.

|  | Rs. per <br> unit |
| ---: | :---: |
| Current selling price | 2,000 |
| Variable cost |  |
| Material | 750 |
| Labour | 300 |
| Overhead | 150 |

The fixed cost of the company is Rs. $3,200,000.00$.
A budgeted annual sale for next year is 25,000 units, which is the same as this year.

Your are required to calculated:
(i) The increase in selling price necessary to maintain the existing contribution/sales ratio and the break-even point.
(ii) The new sales volume required to maintain the same net profit
(iii) If there is an outside order for 5,000 units of this special product at Rs. 1,500 per unit to be produced next year what will be your advice? If this order is undertaken, what will be the profit on this order?
(Total 20 marks)

The standard cost of producing 100 units of a product " $P$ " using two materials $\mathbf{A}_{1}$ and $\mathbf{A}_{\mathbf{2}}$ is given below.

| Material | Quantity | Standard Price |
| :--- | :--- | :--- |
| $A_{1}$ | 60 kg | Rs. 10 per kg |
| $A_{2}$ | 50 kg | Rs. 12 per kg |


| Direct Wages | No. of Hours | Rate per Hour |
| :--- | :--- | :--- |
| Skilled | 40 | Rs. 15 per |
| Semi-skilled | 30 | Rs. 10 per |
| Unskilled | 20 | Rs. 08 per |

Overhead is absorbed on standard Direct Labour at Rs. 14 per hour. Due to certain reasons, the standard materials has been revised as below:

| Material | Quantity |
| :--- | :--- |
| $A_{1}$ | 65 kg |
| $A_{2}$ | 45 kg |

During the period, the company achieved 100 units of the product " P " and the actual expenses incurred are given below:

| Direct Wages | No. of Hours | Rate |
| :--- | :--- | :--- |
| Skilled | 40 | Rs. 16 per hour |
| Semi-skilled | 28 | Rs. 12 per hour |
| Unskilled | 25 | Rs. 09 per hour |

Actual fixed overhead incurred was Rs. 1,400.
You are required to calculate all the variances relating to material, labour and overhead.
(Total 20 marks)

The following information relates to process 2 of a three stage production process for accounting period 10 .

| Material input from process 1 | 5,000 units at Rs. 1.85 per <br> unit |
| :--- | :--- |
| Material added | Rs. 2,245 |
| Direct labour | Rs. 4,320 |
| Overheads | Rs. 3,090 |
| Number of units scrapped: | 800 units |

Opening stock was 600 units, complete as to:

> Cost in Rs.

| Material from process 1 | $100 \%$ | 945 |
| :--- | :---: | ---: |
| Added material | $60 \%$ | 180 |
| Labour | $30 \%$ | 405 |
| Overhead | $30 \%$ | 135 |
|  |  | Rs. 1,665 |

Work in progress at the end of the period:1,000 units complete as to

| Material from process 1 | $100 \%$ |
| :--- | :---: |
| Material added | $75 \%$ |
| Labour | $40 \%$ |
| Overhead | $20 \%$ |

Normal loss is taken at $10 \%$ of input during the period. Scrap value of any loss is 50 cents per unit. You are required to prepare the process accounts and the profit and lost account.
(Total 20 marks)
(a) Why do we need standard costs?
(b) Briefly explain the meaning of 'allocation', 'apportionment' and 'absorption' in relation to overheads.
(c) What is the important aim of budgetary control?
(d) A production company operates 3 production cost centers and 2 service cost centers in its production division. Costs allocated to these division for the month of April areas follows:

| Production | Costs allocated (Rs) |
| :---: | :--- |
| Cost Centre | $40,000.00^{\circ}$ |
| A | $50,000.00$ |
| B | $71,000.00$ |
| C |  |

Service Cost

## Centers

| S1 | $28,000.00$ |
| :--- | ---: |
| S2 | $19,000.00$ |

It has been decided to apportion costs of the service cost centers as follows

| Cost Centers | A | B | C | S1 | S2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S1 | - | 50 | 30 | - | 20 |
| S2 | 50 | 30 | 15 | 05 | - |

Calculate the total production overhead which should be charged to each of the production cost centers using the continuous allotment methods.
(10 marks)
(Total 20 marks)
(a) "The Sales Budget is the foundation of all other budgets" Do you agree this statement? Explain.
(b) Using the information given below, to prepare budgets for the month of January for
Production quantities;
Material purchases in quantity and value, including total value;
Sales in quantity and value, including total value;
Material usage in quantities;

|  |  | Product | Price each | Quantity |
| :---: | :---: | :---: | :---: | :---: |
| Sales: |  | $P$ | 110 | 1124 |
|  |  | Q | 87 | 1445 |
|  |  | R | 89 | 2345 |
|  |  | W | 75 | 1365 |
| Materials used in the company's products: |  |  |  |  |
|  |  |  |  |  |
| Material | X1 | X2 | Y1 | Y2 |
| Unit cost | Rs.4/= | Rs.6/= | Rs.7/= | Rs.8/= |
| Quantities used in: | X1 | X2 | Y1 | Y2 |
|  | (units) | (units) | (units) | (units) |
| Product $P$ | 4 | 2 | 1 | 2 |
| Product Q | 3 | 3 | 5 | 3 |
| Product R | 2 | 1 | 6 | 4 |
| Product W | 5 | 4 | 2 | 1 |
| Finished stocks: | Product | Product | Product | Product |
|  | $\mathrm{P}$ | Q | R | W |
|  | (units) | (units) | (units) | (units) |
| Quantities |  |  |  |  |
| $1^{\text {st }}$ January | -1000 | 1500 | 600 | 700 |
| $31{ }^{\text {st }}$ January | 1200 | 1550 | 400 | 550 |
| Material stocks: | X1 | X2 | Y1 | Y2 |
|  | (units) | (units) | (units) | (units) |
| $1^{\text {st }}$ January | 26000 | 20000 | 12000 | 13000 |
| $31{ }^{\text {st }}$ January | 31200 | 24000 | 14400 | $12500{ }^{*}$ |

(17 Marks)

