## Eastern University, Sri Lanka

Faculty of Commerce \& Management Third Year First Semester Examination in BBA, BBA Specialization in Marketing, BBA Specialization in HRM 2017/2018 (2019) (Proper/Repeat) July 2019

MGT 3013 - Managerial Accounting
Calculator is permitted
Total number of Pages 20
Circle the answers for MCQ and write the answers and calculations within the given space.
Answer all questions
Time: 03 Hours
Q1 i. Given production is $1,00,000$ units, fixed costs is Rs $2,00,000$ Selling price is Rs 10 per unit and variable cost is Rs 6 per unit. Determine profit using technique of marginal costing.

1. Rs $8,00,000$
2. Rs $2,00,000$
3. Rs $6,00,000$
4. None of the above
(02 Marks)
ii. What is the correct statement regarding ABC ?
5. Under ABC system overhead costs are identified with each major activity in place of a department.
6. The traditional costing system serves effectively the purpose of product costing and pricing decisions.
7. Activity based costing helps in identifying total costs with each activity performed in the business.
8. Activity based management and Activity based management are synonymous terms.
(02 Marks)
iii. Which of the following is not correct when referring to fixed costs
1.. Whether a cost is committed or discretionary will depend in large part on management's strategy.
9. Discretionary fixed costs arise from annual decisions by management.
10. Fixed costs remain constant in total throughout the relevant range.
11. Committed fixed costs can often be reduced to zero for short periods of time without seriously impairing the long-run goals of the company.
iv. The cost of a project is Rs. 50,000 and it generates cash inflows of Rs. 20,000, Rs. 15,000 , Rs. 25,000 and Rs. 10,000 in four years. What is the NPV of the proposed investment assuming a $10 \%$ rate of discount?
12. 6250
13. 

6000
2. 6175
4.
6350
(02 Marks)
v. $5,000 \mathrm{~kg}$ of material are input to a process in a period. The normal loss is $10 \%$ of input. There is no work-in-progress at the end of each period. Costs incurred in the process in the period totaled Rs. 40,500 . What is the abnormal loss/gain, if the actual output is $4,650 \mathrm{~kg}$ ?
1.
200
3. 150
2. 250
4.
175
(02 Marks)
vi. Given Maximum value of production and minimum value of production is 10,000 and 5000 units respectively. Maximum total cost is Rs 25,000 and minimum total cost is Rs 15,000 . Determine total fixed cost and per unit marginal cost.
1.
Rs 5 per unit, Rs 2000
3.
Rs 10 per unit, Rs 10,000
2.
Rs 2 per unit, Rs 5,000
4.
None of the above
(02 Marks)
vii. The data related to Production of T are for material X standard data and actual date are 40 kgs @ Rs 10 and 55 kgs @ Rs 9 , respectively. The standard data and actua data for material Y are 50 kgs @ Rs 5 and 35 kgs @ Rs 7. Determine materia usage variance.

1. Rs 75 favorable
2. Rs 90 unfavorable
3. Rs 75 unfavorable
4. Rs 90 favorable
viii. A flexible budget
5. Gives departmental managers direction on spending limits
6. Gives managers direction as to investigations into variances revealed by analysis of actual performance
7. Allows departmental managers to design their own budget report
8. Reflects changes in activity levels of the company
(02 Marks)
ix. Given selling price is Rs. 10 per unit, variable cost is Rs. 6 per unit and fixed cost is Rs. 5,000 . What is the break-even point?
9. 500 units
10. 1000 units
11. 1250 units
12. None of the above
(02 Marks)
x. A group of individual indirect cost item is defined as,
13. Direct pool
14. Cost pool
15. Indirect pool
16. Item pool

## (02 Marks)


(Total 20 Marks)

Q2. a) Product X in a manufacturing unit passes through three processes, $\mathrm{A}, \mathrm{B}$ and C . The expenses incurred in the three processes during year 2019 were as under,

| Unit of input issued | Process A <br> 9000 | Process B | Process C |
| :--- | :--- | :--- | :--- |
| Cost per unit | 150 |  |  |
| Sundry materials | 23500 | 25000 | 15000 |
| Direct Labour | 80000 | 207200 | 26110 |
| Direct Expenses | 2250 | 7200 | 8100 |
| Selling price per unit | 200 | 280 | 600 |

Other information,

| Process | Output( Units) | Process Loss (\%) |
| :--- | :--- | :--- |
| A | 8400 | 5 |
| B | 5700 | 10 |
| C | 3660 | 3 |

During the year, three-fourth of the output of process A and two- third of the output of process $B$ were transferred to the next process and the balances were sold outside. The entire output of the process C was, however sold outside. The losses of the three processes were sold at Rs. 5 per unit for process A , Rs 10 per unit for the process $B$ and Rs. 15 per unit for process $C$.
i. Prepare the three process Accounts and
ii. A statement of income considering a total selling and distribution expenses of Rs. 45000 which is not allocated to processes.

$$
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& \% \\
& \vdots \\
& \vdots
\end{aligned}
$$

b)

From the following particulars relating to a contract, prepare,
(a) The Contract Account.

The contract price has been agreed at Rs.250, 000. Cash has been received from the contractee amounting to Rs.180, 000 .

> (Rs.)

Material sent to site 85349
Labour engaged on site
74375
Plant installed at cost 15000
Direct expenditure 4126
Establishment charges 3167
Materials return to store 549
Work certified 195000
Cost of work not certified 4500
Material on hand, Dec 311883
Wages accrued on Dec 312400
Direct expenditure accrued on Dec 31240
Value of plant Dec 3111000

Q3. a) The standard cost data of three products $\mathrm{X}, \mathrm{Y}$, and Z manufactured by a company are given below together with the budgeted sales and unit selling prices for 2018 2019.

| Particulars | X | Y | Z |
| :--- | :--- | :--- | :--- |
| Budgeted sales (units) | 25000 | 20000 | 15000 |
| Selling price per unit(Rs) | 40 | 60 | 80 |
| Cost per unit(Rs) | 28 | 48 | 64 |

In April 2018 the cost department of the company gathered the following details for 2018-2019

| Particulars | X | Y | Z |
| :--- | :--- | :--- | :--- |
| Budgeted sales (units) | 20000 | 22000 | 16000 |
| Average sales realization <br> per unit | 42 | 56 | 81 |
| Actual cost per unit | 30 | 50 | 63 |

Required,
i. Budgeted and actual profit for 2018-2019
(06 Marks)
ii. The variance in profit analyzed into, (Cost variance, Sales price variance, Sales value variance, Profit variance)

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& * \\
& * \\
& \vdots \\
& \vdots
\end{aligned}
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b) From the following data calculate the cost per mile of a vehicle,

|  | (Rs.) |
| :--- | :--- |
| Value of vehicle | 15000 |
| Road license for the year | 500 |
| Insurance charge per year | 100 |
| Garage rent per year | 600 |
| Driver's wages per month | 200 |
| Cost of petrol per litre | 0.80 |
| Miles per litre | 8 |
| Proportional charge per mile and maintenance per <br> mile | 0.20 |
| Estimated life | 150000 miles |
| Estimated annual mileage | 6000 miles |

Ignore interest on capital

Q4. a) Chico Ltd. Manufacture two products AB and CD by mixing the following raw materials in the proportion shown:

| Raw material | Product AB | Product CD |
| :--- | :--- | :--- |
| A | $80 \%$ | $\vdots$ |
| B | $20 \%$ |  |
| C |  | $50 \%$ |
| D |  | $50 \%$ |

The finished weights of the products $A B$ and $C D$ are equal to weight of their ingredients. During the months of June, it is expected that 60 tonnes of $A B$ and 200 tonnes of CD will be sold.
Actual and budgeted inventories for the month of June are as follows:

| Material | Actual inventory <br> $\left(1^{\text {st June) }}\right.$ <br> Quantity (Tonnes) | Budgeted inventory <br> (30 th June) <br> Quantity (Tonnes) |
| :--- | :--- | :--- |
| A | 15 | 20 |
| B | 10 | 40 |
| C | 200 | 300 |
| D | 250 | 200 |
| Product AB | 10 | 5 |
| Product CD | 50 | 60 |

The purchase price of the materials for June is expected to be as follows:

| Material | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| cost per <br> Tonne(Rs) | 500 | 400 | 100 | 200 |

All materials will be purchased on $3^{\text {rd }}$ of June.
Prepare:
i. Production budget for the month of June.
(05 Marks)
iv. Material requirement budget for June
(04 Marks)
iii $\mathbf{q}$. Material purchase budget indicating the expenditure for materials for the month of June.
b) A jobbing factory has undertaken to supply 200 pieces of a cốmponent per month for the ensuring three months. Every month a badge order is open against which materials and labour hours are booked at actuals. Overheads are levied at a rate per labour, hour. The selling price contracted for is Rs. 8 per piece. From the following data present the cost and the profit per piece of each badge order and overall position of the order for 600 pieces.

Prepare the cost sheet showing badge-wise and month-wise cost and profit.

| Month | Badge output <br> (units) | Material cost <br> (Rs.) | Direct wages <br> (Rs.) | Direct labour <br> (Hrs.) |
| :--- | :--- | :--- | :--- | :--- |
| January | 210 | 650 | 120 | 240 |
| February | 200 | 640 | 140 | 280 |
| March | 220 | 680 | 150 | 280 |

The other details,

| Month | Chargeable expenses(Rs.) | Direct Labour (Hrs.) |
| :--- | :--- | :--- |
| January | 12000 | 4800 |
| February | 10560 | 4400 |
| March | 12000 | 5000 |

(06 Marks)
(Total 20 Marks)

Q5. a) Nimal Industries Limited manufactures and sells five different products ing one common raw material which is available according to requirements at Rs 8 per kg. But the skilled labour required for production is in short supply and is currently limited to 35000 hours per month at Rs. 15 per hour.
Variable production overhead is Rs. 5 per labour hour and fix production cost amount to Rs. 100000 per month.
Variable selling and distribution overhead is $10 \%$ of sales value while fixed selling, distribution and administration cost is Rs. 80000 per month. Further details regarding production and sales of this product as follows,

| Product | Current <br> Demand( <br> units) | Selling price <br> per unit(Rs) | Raw <br> materials <br> required per <br> unit (kgs) | Direct labour <br> hours <br> required per <br> units |
| :--- | :--- | :--- | :--- | :--- |


| A | 6000 | 40 | 1.0 | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| B | 4000 | 60 | 1.5 | 1.4 |
| C | 5000 | 80 | 2.0 | 1.8 |
| D | 4800 | 90 | 2.5 | 2.0 |
| E | 4500 | 100 | 3.0 | 2.4 |

Required,
,
1 O. Optimum Product mix you would recommend
ii b. Profit earned as per mix in (a)
(10 Marks)
b) "Management accounting begins where financial accounting ends". With reference to the above statement, explain the functions of management accounting and financial accounting.
(05 Marks)
c) Distinguish between joint products and by-products.

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& * \\
& *
\end{aligned}
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