Seat No. : $\qquad$
LB-107
April-2014
T.Y. M.B.A. (KS) (Integrated)

Cost \& Management Accounting
Time : 3 Hours]
[Max. Marks : 100
Instructions: (1) All questions carry equal marks.
(2) Figure to the right indicates marks.
(3) Show necessary calculations as a part of your answer.

1. (a) A particular product passes through 3 processes before its completion. Output of each process is charged to next process with $20 \%$ profit on transfer price. Output of process III is charged to finished stock on similar basis. There was no WIP at the beginning of the year and overheads have been ignored. Stock is evaluated at Prime Cost. Following data are obtained at the end of $31^{\text {st }}$ March, 2014. Prepare necessary accounts :

|  | Process I | Process II | Process III | Finished <br> Stock |
| :--- | :---: | :---: | :---: | :---: |
| Direct Material | 4,000 | 6,000 | 2,000 | - |
| Direct Wages | 6,000 | 4,000 | 8,000 | - |
| Closing Stock | 2,000 | 4,000 | 6,000 | 3,000 |
| Sales | - | - | - | 36,000 |

(b) Assume that Kit company can process products A, B and C each having possibility of further processing. After further processing, it can be sold at ₹ 12 , ₹ 33 and ₹ 21 respectively.

Units manufactured and sold : A - 10,000, B - 10,500, C - 11,500
Cost of Raw material is $2,00,000$.
Additional processing (separable) costs are as follows :
A : ₹ 35,000
B : ₹ 46,500
C: ₹ 51,500
How much of the joint cost is allocated to each product?
P.T.O.
2. (a) Using the information given below, prepare operating statements for the months of June and July using (i) Variable Costing and (ii) Absorption costing.

Suggest reasons why the two techniques disclose different amounts of profits.

| Particulars | $₹$ |
| :--- | :---: |
|  | Monthly costs |
| Selling price (per unit) | 50 |
| Direct Material Cost (per unit) | 18 |
| Direct Labour Cost (per unit) | 4 |
| Variable production overheads <br> (per unit) | 3 |

Variable selling costs are $10 \%$ of sales revenue and normal production capacity is 22,000 units per month.

|  | Sales (units) | Production (units) |
| :--- | :---: | :---: |
| June | 20,000 | 24,000 |
| July | 24,000 | 20,000 |

(b) TR Ltd. manufactures two products, namely A and B using the same plant and process. The following information relates to a production period :

| Particulars | Product | A |
| :--- | :---: | :---: |
| Output in units | B |  |
| Direct labour hours (per unit) | 1 | 2 |
| Machine hours per unit | 3 | 1 |
| Set-up period | 10 | 40 |
| Orders handled in the period | 15 | 60 |


| Overhead Costs : | $₹$ |
| :--- | ---: |
| For machine activity | $6,60,000$ |
| For production run setups | 60,000 |
| For handling of orders | $1,35,000$ |
|  | $8,55,000$ |

Calculate the production overheads to be absorbed by one unit of each of the products using the following costing methods :
(a) A traditional costing approach using a direct labour hour rate to absorb overheads.
(b) An activity based costing approach, using suitable cost driver to trace overheads to products.

## OR

Answer any two :
(1) What do you mean by Activity Based Costing ? Explain the difference between conventional costing system and activity based costing system.
(2) What do you mean by Management Accounting ? Explain the distinction between cost accounting and management accounting.
(3) "Absorption costing income exceeds marginal costing income when the number of units sold exceeds the number of units produced." Do you agree ? Justify your answer with the relevant example. Also discuss the difference between absorption costing and variable costing.
3. (a) Discuss advantages and limitations of Marginal Costing ?

## OR

Explain Break Even Analysis in detail.
P.T.O.
(b) From the following information relating to a Ltd. Co., you are required to find out:
(1) Break-Even Point (BEP)
(2) Margin of Safety
(3) Profit
(4) Volume of sales to earn profit of ₹ 6,000
(5) New Break Even point if sales increases by $10 \%$.
(6) Suppose variable cost decrease by $10 \%$, what will be new BEP ?

Fixed cost - 4,500
Variable Cost - 7,500
Total Sales- - 15,000
Units Sold - 5,000
(c) The costs per unit of 3 products $\mathrm{X}, \mathrm{Y}$ and Z are given below :

| Products | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :---: | :---: | :---: |
| Direct Material | 20 | 16 | 18 |
| Direct Labour | 12 | 14 | 12 |
| Variable Overheads | 8 | 10 | 6 |
| Fixed Expenses | 6 | 6 | 4 |
| Total | $\mathbf{4 6}$ | $\mathbf{4 6}$ | $\mathbf{4 0}$ |
| Profit | 18 | 14 | 12 |
| Selling Price | 64 | 60 | 52 |
| No. of units produced | $\mathbf{1 0 , 0 0 0}$ | $\mathbf{5 , 0 0 0}$ | $\mathbf{8 , 0 0 0}$ |

Production arrangement is such that if one product is given up the production of the others can be raised by $50 \%$. The directors propose that product Z should be given up because the contribution from the product is the lowest. Present suitable analysis of the data indicating whether the proposal should be accepted.
4. (a) From the following information of the Friends Ltd., prepare cash budget for the three months from April 2014 to June 2014.

| Months | Sales (₹) | Closing Stock <br> $(₹)$ | Total Overhead <br> Expenses (₹) |
| :--- | :---: | :---: | :---: |
| February | $3,20,000$ | 40,000 | 48,000 |
| March | $4,00,000$ | 60,000 | 60,000 |
| April | $4,80,000$ | $1,00,000$ | 80,000 |
| May | $6,40,000$ | $1,20,000$ | 72,000 |
| June | $5,60,000$ | $1,10,000$ | 80,000 |
| July | $6,00,000$ | $1,00,000$ | 60,000 |

## Additional Informations :

(1) Bank balance on 1-4-2014 - ₹ $2,00,000$.
(2) Goods are sold at a profit of $33.1 / 3 \%$ on cost price.
(3) Purchases are made for cash.
(4) Cash sales are $40 \%$ of the total sales, $50 \%$ of credit sales are collected in the month after sale and remaining sales are collected in the second month after sale.
(5) Total overhead expenses include monthly fixed overhead expenses of ₹ 20,000 which is paid in the same month. Variable overhead expenses are paid in the subsequent month.
(6) An old machine is to be sold for ₹ $1,20,000$ in May 2014.
(7) A new machine is to be purchased for ₹ $2,00,000$ in May 2014, the payment of which is to be made $80 \%$ against delivery in May and the remaining amount in the subsequent month.
(8) Income-tax is to be paid for ₹ 40,000 in May 2014.

OR
What do you mean by 'Zero base budgeting' ? Discuss its advantages and disadvantages.
(b) The following particulars are available from the records of a manufacturing company.

| Level of Activity | $\mathbf{6 0 \%}$ <br> $\boldsymbol{₹}$ | $100 \%$ <br> $\boldsymbol{₹}$ |
| :--- | ---: | ---: |
| Cost of direct material | 18,000 | 30,000 |
| Direct wages | 12,000 | 20,000 |
| Indirect wages | 6,000 | 10,000 |
| Repairs \& Maintenance | 13,000 | 19,000 |
| Power \& Fuel | 7,500 | 11,500 |
| Rent | 24,000 | 24,000 |
| Depreciation | 20,000 | 20,000 |
| Insurance | 12,000 | 12,000 |
| Administrative Overheads | 20,000 | 28,000 |
| Selling Overheads | 12,000 | 16,000 |

Total production at $100 \%$ capacity is 10,000 units.
Prepare a Flexible Budget at $70 \%$ and $90 \%$ capacity.

## OR

Write a detailed note on Concept of Cost Control and Cost reduction with various alternatives to manage the same.
5. (a) ABC Ltd. has established the following standard mix for producing gallons of product 'A'.

5 gallons of Material X at $₹ 7$ per gallon
3 gallons of Material Y at ₹ 5 per gallon
2 gallons of Material Z at $₹ 2$ per gallon
A standard loss of $10 \%$ of output is expected to occur.
Actual input was as under :
53,000 gallons of Material X at ₹ 7 per gallon
28,000 gallons of Material Y at ₹ 5.30 per gallon
19,000 gallons of Material Z at $₹ 2.20$ per gallon
Actual output for a period was 92,700 gallon of product ' A '.
Compute the Material Variances.
(b) The following information was obtained from the records of a manufacturing unit using Standard Costing System.

| Particulars | Budgeted | Actual |
| :--- | ---: | ---: |
| Production (units) | 4,000 | 3,800 |
| Working days | 20 | 21 |
| Fixed overheads (₹) | 40,000 | 39,000 |
| Variable overheads (₹) | 12,000 | 12,000 |
| Man hours (hrs.) | 4,000 | 3,800 |

You are required to calculate all overhead variances.

