# K.J. Somaiya Institute of Management Studies \& Research Vidya Vihar, Mumbai 

Cost Management \& Management Accounting
PGDM-HCM Trimester 2

## Maximum Marks:50

Duration: 3 hours
Date : 07/01/2019

- Note: Answer question 1 compulsorily and Any Four more.
- Neatness \& presentation carry marks
- All questions carry equal marks


## Question 1

The following details of cost are extracted from the books for the year ended 31st March 2018.

| Particulars | Rs. |
| :--- | :---: |
| Selling price per item | 40 |
| Variable cost per item | 25 |
| Fixed cost: |  |
| -Staff salaries for the year | $1,20,000$ |
| -General office cost | 80,000 |
| -Advertising cost | 40,000 |

The company is fixing up the targets for sales and costs. Presently the company is selling 24000 pieces annually
a)Calculate the break -even point and margin of safety in sales revenue and number of pieces sold.
b)Assume that 20,000 pieces were sold in a year. Find out the net profit of the firm.
c)If it is decided to introduce selling commission of Rs. 3 per piece, how many would require to be sold in a year to earn a net income of Rs. 15,000 ?
d) Assuming that for the next year an additional staff salary of Rs.33,000 is anticipated, and price of a piece is likely to be increased by $15 \%$, what should be the break -even point in number of pieces and sales revenue?

## Question 2

Intercity Bus Company has been given a route 22 km long to run a bus. The bus costs the company a sum of Rs. $20,00,000$. It has been insured at $3 \%$ pa and the annual tax will amount to Rs5000. Garage rent is Rs. 5000 per month. Annual repairs will be Rs. 10000 and the bus is likely to last for 5 years.

The drivers salary will be Rs. 18000 pm and the conductors salary will be Rs 10000 pm in addition to $10 \%$ of total collections as commission ( to be shared by the driver and conductor equally.)

The cost of stationery will be Rs 1500 pm. Manager cum accountants salary is Rs. 25000 per month
Diesel \& Oil will be Rs. 80 per 5 km . The bus will make three round trips carrying on an average 40 passengers on each trip. Assuming $15 \%$ profit on takings, calculate the bus fare to be charged for each passenger kilometer. The bus will run on average 25 days in a month.

## Question 3

Softhub Ltd. adopts a six-monthly time span sub divided into monthly intervals for the cash budget. The following information is available in respect of its operations.
(Rs in lakhs)

|  | Months |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| Sales (Rs) | 40 | 50 | 60 | 60 | 60 | 40 |
| Purchases (Rs) | 1 | 1.5 | 2 | 2 | 2 | 1 |
| Direct labour (Rs) | 6 | 7 | 8 | 8 | 8 | 6 |
| Manufacturing Overhead (Rs) | 13 | 13.5 | 14 | 14 | 14 | 13 |
| Administration expenses (Rs) | 2 | 2 | 2 | 2 | 2 | 2 |
| Distribution expenses (Rs) | 2 | 3 | 4 | 4 | 4 | 2 |
| Raw materials (Rs) | 14 | 15 | 16 | 16 | 4 | 15 |

Assume the following financial flows during the period.

Inflows: 1. Interest received in month 1 and month 6 to be Rs 1 lakh
2. Dividend received in month 3 and 6 to be Rs 2 lakhs each 3. Sale of shares in month 6 , Rs 1.6 lakhs

Outflows: 1. Interest paid in month 1, Rs 0.4 lakh
2. Dividends paid month 1 and 4, Rs 2 lakhs each
3. Instalments payment on machine , month 6, Rs 20lakhs
4. Repayment of Ioan month 6, Rs 80lakhs

Assume that $10 \%$ of each months' sale are for cash, balance $90 \%$ on credit. Assume sales for the months before the budget period to be Rs 50 lakhs each month. The terms and credit experience of the firm are:

1. No cash discount
2. $50 \%$ of all accounts that are going to pay do so in the next month
3. Balance $50 \%$ of all accounts that are going to pay do so within next 2 months.

From the above details prepare a cash budget for a six month horizon.

## Question 4

GoodHealth Ltd produces three products with the following cost structure. The company allocates the overhead costs based on direct labour cost and computes total unit costs for each product as follows:

|  | Product A | Product B | Product C |
| :--- | :---: | :---: | :---: |
| Direct Materials Rs | 50 | 60 | 65 |
| Direct labor | 20 | 20 | 10 |
| Factory Overhead | 116 | 116 | 58 |
|  | 186 | 196 | 133 |

The target and actual selling prices are

|  | Product A | Product B | Product C |
| :--- | :---: | :---: | :---: |
| Product cost | Rs | 186 | 196 |
| 133 |  |  |  |
| Target Price (150\%) | 279 | 294 | 199.5 |
| Actual Price | 280 | 250 | 300 |

a) Is Product $B$ the least profitable and is Product $C$ the most profitable? The company is worried about the fact that Product $B$ sells for a much lesser price than expected while Product $C$ sells for a higher price. The controller decides to find the true costs
b) The controller who conducted research about product costing, suggested that each product absorbed the following proportion of each cost driver.

|  |  |  | Product |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Overhead | Budget | Cost Driver | A | B | C |
| Machine Setup | Rs. 8000 | No. of setups | $20 \%$ | $50 \%$ | $30 \%$ |
| Materials Handling | $1,00,000$ | Weight of direct materials | $40 \%$ | $25 \%$ | $35 \%$ |
| Hazardous control | $2,50,000$ | No. of inspections | $25 \%$ | $45 \%$ | $30 \%$ |
| Quality control | 75,000 | No. of inspections | $30 \%$ | $35 \%$ | $35 \%$ |
| Other Overhead | 60,000 | Direct labour hours | $20 \%$ | $70 \%$ | $10 \%$ |

Given these percentages, what is the new product cost for the three products based on the activity based costing system that the controller would like to switch to?

Product A with annual sales of 1000 units; Product B with annual sales of 3000 units; Product C with annual sales of 500 units.
c) What is the new target price for each product based on 150 percent of the new costs under the ABC system? Compare this price with the actual selling price and comment on the result. Assuming that you
are a manager of the company, what action would you take based on activity -based Unit costs

## Question 5

Show the stores Ledger entries as they would appear when using a) Weighted Average Method b) LIFO Method of pricing issues for the following transactions

| Date | Transaction | Units | Value |
| :--- | :--- | :--- | :--- |
| April 1 | Balance B/F | 300 | Rs. 600 |
| 2 | Purchases | 200 | 440 |
| 4 | Issued | 150 | - |
| 6 | Purchases | 200 | 460 |
| 11 | Issued | 150 |  |
| 19 | Issued | 200 |  |
| 22 | Purchased | 200 | 480 |
| 27 | Issued | 250 |  |
|  |  |  |  |
|  |  |  |  |

In a period of rising prices, what are the effects on each method of accounting?

## Question 6

Write Short notes on ANY FOUR of the following:
a) Master Budget
b) Margin of Safety
c) Recovery of Overheads
d) Compare financial accouting with cost accounting
e) Opportunity Costs

