# K.J. Somaiya Institute of Management Studies \& Research 

## Vidya Vihar, Mumbai

Cost \& Management Accounting
PGDM- IB Trimester 2

## Maximum Marks:50

Date: January 7,2019 hours

- 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

Selling price per item
Variable cost per item
Fixed cost:
-Staff salaries for the year
-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

LaJolly airways operates commuter flights in Calcutta. Due to a political convention held in Agartala, the airline added several extra flights during a two week period. Additional cabin crews were hired on a temporary basis. However rather than hiring additional flight attendants, the airline used its current attendants on overtime. Nasreen Ghosh worked the following schedule on November 10. All of Ghosh's flight on that day were extra flights that the airline would not normally fly.

Regular Time: 2 round trip flights between Agartala and Patna (8 hours)
Overtime: 1 way flight from Agartala to Ranchi (3 hours)
Ghosh earns Rs. 140 per hour plus time and a half for overtime. Fringe benefits cost the airline Rs. 40 per hour for any hour worked, regardless of whether it is a regular or overtime hour.
a) Compute the direct cost of compensating Ghosh for her services on the flight from Agartala to Ranchi
b) Compute the cost of Ghosh's services that is an indirect cost.
c) How should the cost computed in question ' $b$ ' be treated for cost accounting purposes?
d) Ghosh ended her workday on November 10 in Ranchi. However, her next scheduled flight departed Agartala at 11 am on November 11. This required Ghosh to "deadhead" back to Agartala on an early morning flight. This means she travelled fromRanchi to Agartala as a passenger, rather than as a working flight attendant. Since the morning flight from Ranchi to Agartala was full, Ghosh displaced a paying customer. The revenue lost by the airline was Rs.870. What type of cost is Rs.870? To what flight, if any, is it chargeable? Why?

## Question 5

Q. 5 The alloy manufacturing company is in the business of castings that can withstand high temperatures. Its primary customers are aviation manufacturers. The company understands that cost of quality is of utmost importance. A cost of quality report is prepared and the details are given below-
(amount in lakhs of rupees)

|  | $\underline{2008}$ | $\underline{\mathbf{2 0 0 7}}$ |
| :--- | :---: | :---: |
| Sales | 18,750 | $\mathbf{1 5 , 0 0 0}$ |
| Materials inspection | 60 | 300 |
| Production Inspection | 125 | 160 |
| Finished product Inspection | 70 | 225 |
| Preventive equipment maintenance | 60 | 20 |
| Scrap | 300 | 500 |
| Warranty Repair | 400 | 700 |
| Product Design Engineering | 270 | 150 |
| Vendor Certification | 60 | 10 |


| Direct costs of returned goods | 80 | 250 |
| :--- | :---: | :---: |
| Training of factory workers | 140 | 40 |
| Product testing equipment Maintenance | 60 | 60 |
| Product Testing labour | 90 | 210 |
| Customer complaint support | 30 | 70 |
| Rework before shipment | 180 | 240 |
| Product liability settlement | 60 | 360 |
| Emergency Repair \& maintenance | 60 | 190 |

a)Prepare a cost of quality Report.
b)Indicate the ratio of each costs to revenues
c)Coment on the results
d)In addition to the financial measures listed above, what other non financial measures should the company monitor in its efforts to monitor to attain TQM.

## Question 6

Write Short notes on ANY FOUR of the following:
a) Master Budget
b) Margin of Safety
c) TQM as a strategic tool
d) Compare financial accounting with cost accounting
e) Opportunity Costs

