SARDAR PATEL UNIVERSITY
B.B.A. (GENERAL) SEMESTER: VI EXAMINATION 2015
Wednesday, $08^{\text {th }}$ April
10:30 a.m To 12:30 p.m UM06CBBA02: ACCOUNTING FOR DECISION MAKING

Total Marks: 60
Note: 1. Figure to the right indicate full marks of question.
2. All questions carry equal marks.
3. Working notes are the part of answer.

Q-1 (A) Shiv Limited provides you the following information for its product.

| Total fixed cost | Rs. 2,00,000 |
| :--- | ---: |
| Total variable cost | Rs. $3,00,000$ |
| Total sales | Rs. $6,00,000$ |
| Output and sales (units) | 60,000 |

Calculate:

1. Break-even point (in units \& rupees).
2. Margin of Safety.
3. Sales to earn profit of Rs. $2,00,000$.
4. Profit earned at a sales of Rs. $7,50,000$.
5. Sales to earned profit at $10 \%$ on sales price.
6. Margin of Safety at a profit of Rs. $1,20,000$.
(B) Following data are availble from the books of Darshan Limited:

| Particulars | Product X (Rs. per unit) | Product Y (Rs. per unit) |
| :--- | ---: | ---: |
| Direct materials | 63 | 51 |
| Direct wages | 18 | 15 |
| Other variable expenses | 15 | 21 |
| Selling prices | 110 | 94 |
| Total fixed expenses | Rs. 10,000 |  |

As a management accountant you are required to present before management.

1. The marginal cost of product $X$ and $Y$ and contribution per unit.
2. The total contribution \& profits resulting from each of the suggested sales mixtures.
3. To decide the best sales mixture.

## Suggested sales mixtures:

I. $\quad 1000$ units of $X$ and 2000 units of $Y$
II. 2000 units of $X$ and 1000 units of $Y$
III. 1800 units of $X$ and 1200 units of $Y$
IV. 1200 units of $X$ and 1800 units of $Y$

OR
Q-1 (A) The following particulars have been extracted from the books of Ram Ltd. for a period
of two years.

| Year | Total Sales (Rs) | Total Costs (Rs) |
| :--- | ---: | ---: |
| $2012-13$ | $5,00,000$ | $6,00,000$ |
| $2013-14$ | $10,00,000$ | $9,00,000$ |

Calculate the following:

1. Profit/volume ratio.
2. Fixed costs.
3. Break even point.
4. Margin of safety for 2013-14.
5. Sales for a profit of Rs $4,00,000$.
6. Profit at a sales of Rs $12,00,000$.
7. Margin of safety at a profit of Rs $4,00,000$.
8. Sales for a loss of Rs $2,00,000$.
9. Variable costs for both the years
(B) Write a note on: Utilities of break even chart with diagram.

Q-2 From the following particulars of Sunil Limited find out the most profitable product mix
and prepare a statement of profitability of the product mix.

| Particulars | Product X | Product Y | Product Z |
| :--- | ---: | ---: | ---: |
| Fixed cost (Rs.) | $1,60,000$ | $2,00,000$ | 60,000 |
| Selling price per unit (Rs.) | 120 | 110 | 100 |
| Requirement per unit |  |  |  |
| Direct material | 10 kgs | 6 kgs | 8 kgs |
| Direct labour | 4 hrs. | 3 hrs | 2 hrs. |
| Variable overhead (Rs.) | 20 | 26 | 16 |
| Cost of direct material per Kg (Rs.) | 4 | 4 | 4 |
| Direct labour hour rate (Rs.) | 4 | 4 | 4 |
| Maximum possible units of sale | 8,000 units | 10,000 units | 3,000 units |

All the three products are produced from the same direct material using the same type of machine and labour.
I. If direct material is key factor, find out priority of product.
II. Direct labour is key factor and is limited to 38000 hours then determine the profit.
III. If sale potential in Value is key factor.
IV. If sale potential in Volume is key factor
OR

Q-2 The cost per unit of three Products $\mathrm{A}, \mathrm{B}$ and C of a company is as follows:

| Particulars | A | B | C |
| :--- | :--- | :--- | :--- |
|  | Rs. | Rs. | Rs. |


| Direct materials | 40 | 32 | 36 |
| :--- | :--- | :--- | :--- |
| Direct labour | 24 | 28 | 24 |
| Variable expenses | 16 | 20 | 12 |
| Fixed expenses | $\underline{12}$ | $\underline{12}$ | $\underline{12}$ |
| Total cost | 92 | 92 | 84 |
| Selling price | $\underline{130}$ | $\underline{120}$ | $\underline{105}$ |
| Profit | 38 | 28 | 21 |
| No. of units produced | 10,000 | 5,000 | 8,000 |

Production arrangements are such that if one product is given up the following changes are required:

1. The production of other can be raised by $50 \%$
2. Total fixed cost will increased by Rs. 10,000 .
3. Total supervison cost of Rs. 20,000 can be saved.

The directors purpose that product C should be given up because it is less profitable. As a management accountant, give your advice to the management that which product should be dropped.
Q-3 (A) Compare and contrast between Differential cost analysis and Marginal costing.
(B) Ashok Ltd. wants to take on lease one computer at a monthly rent of Rs. 15,000 but the directors want to purchase such computer, the cost of which is Rs. $5,50,000$ and its installation charge will be Rs. 50,000 . Its useful life is estimated as 20 years. It is estimated that at the end of its useful life, no scrap value will be realized. As a result of installation of this computer one operator will have to be appointed to whom a monthly salary of Rs. 8,000 will have to be paid. For this purpose, the company will have to take a loan at $15 \%$ interest rate per annum. It is assumed that if this amount is invested in shares, then $20 \%$ profit will be realized from this investment. However, the company will have to pay income tax at $50 \%$ on this profit.
From the above particulars, give your opinion whether it would be advantageous to purchase the computer or not. Show your calculations in support of your opinion.

## OR

Q-3 B4U Manufacturing company Limited produced 5000 units at $50 \%$ production capacity.
Cost of production and other data are as under for the year 2013:

| Particulars | Amount (Rs.) |
| :--- | ---: |
| Direct labour | $1,00,000$ |
| Direct material | 50,000 |
| Other expenses (direct) | 20,000 |
| Factory overheads (50\% fixed) | $1,00,000$ |
| Selling and distribution expenses (75\% fixed) | 40,000 |
| Total cost | $3,10,000$ |

Selling price per unit is Rs. 75.
Company plans to produce 6,000 units at $60 \%$ production capacity in the year 2014 , but it is assumed that:

1) Cost of material and labour increased by $10 \%$ and $5 \%$ respectively.
2) Fixed cost increase by $5 \%$
3) No change in selling price.

Under such conditions, company received offer from one customer to increase production capacity by $40 \%$.

If management of the company wants to earn Rs. 90,000 profits at $100 \%$ production capacity then find out the selling price per unit for a special offer.
The following figures for a period were extracted from the books of JHP Limited prepare value added statement and distribution of value added statement for the year 2014:

| Particulars | Amount <br> (Rs.) | Particulars | Amount <br> (Rs.) |
| :--- | ---: | :--- | ---: |
| Sales | $71,42,400$ | Carriage outward | 63,360 |
| Commission on sales | 57,600 | Director's sitting fees <br> etc. | $1,15,200$ |
| Purchase of raw materials | $28,80,000$ | Interest on Bank Loan | 51,840 |
| Stock of Raw materials: |  | Dividend to shareholders | 86,400 |
| Opening | $2,44,800$ | Retained earnings | $3,60,000$ |
| Closing | $3,11,040$ | Depreciation | $1,54,400$ |
| Other materials (net) | $2,67,840$ | Income-tax provided | $2,88,000$ |
| Finished stock: |  | Audit fee | 11,520 |
| Opening | $5,76,000$ | Travelling expenses | 60480 |
|  | $6,91,200$ | Advertisement | 72,000 |
| Staff welfare expenses | $4,55,040$ | Postage and telegrams | 40,320 |
| Insurance | 78,880 | Salaries and Wages | $18,14,400$ |
| Rent and Taxes | 46,080 | Contribution to PF | $1,72,800$ |
| Managing <br> remuneration | $2,41,920$ | Subscription | 5,760 |

Does your statement corroborate the assertion of the Chairman of the Company in the Annual General Meeting that $75 \%$ of added value is accounted by employee costs?

OR
Q-4 (A) Define the term value added with example and explain how does value added statement is helpful for performance measurement.
(B) Difference between value added statement and profit \& loss account.

