VPM's
DR VN BRIMS, Thane
Programme: PGDM (2016-18)
Fourth Trimester IV Examination September 2017

Subject	**Strategic Cost Management**		
Roll No.		**Marks**	**60 Marks**
Total No. of Questions	**7**	**Duration**	**3 Hours**
Total No. of printed pages	**3**	**Date**	**26.09.2017**

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q. 1 (a) Fill in the blanks **(1 x 5 = 5 marks)**

I. All indirect costs are collectively called -------------.
II. …………… Loss is generally not controllable.
III. Variable costs are fixed …………………….
IV. Raw Material consumed = Opening Stock of Raw Material + Raw Material Purchased -……………...
V. Margin of Safety = Sales -

(b) The following data are obtained from the records of a factory. **15 Marks**

	Rs.	**Rs.**
Sales 4,000 units @Rs.25 each		1,00,000
Materials consumed	40,000	
Variable overheads	10,000	
Labour charges	20,000	
Fixed overheads	18,000	88,000
Net profits		12,000

Calculate:

(i) The break-even point.
(ii) The sales needed to earn a profit of 20% on sales.
(iii) The extra units which should be sold to obtain the present profit, if it is proposed to reduce the selling price by 20%
(iv) The selling price to be fixed to reduce its break-even point to 500 units under present conditions.
(v) The Margin of safety.

Attempt Any FOUR from the Remaining SIX Questions

Q2) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) **(i)** When volume is 3000 units, average cost is Rs.4 per unit. When volume is 4000 units, average cost is Rs.3.50. The break-even point is 5000 units. Find the profit-volume ratio.
(ii) If margin of safety is 40% of sales, find fixed costs when profit is Rs.20,000.

b) ABC Enterprises has prepared a draft budget for the next year as follows:

Quantity	10,000 units
Sales price per unit	30
Variable cost per unit:	
Direct Materials	8
Direct Labour	6
Variable overheads (2 hrs x 0.5)	1
Contribution per unit	15
Budgeted Contribution	1,50,000
Budgeted Fixed costs	1,40,000
Budgeted Profit	10,000

The Board of Directors is dissatisfied with this budget and asks the manager to come up with an alternate budget with higher target profit figures. The manager reports back with the following suggestions that will lead to budgeted profit of Rs. 25,000. The company should spend Rs. 28,500 on advertising & set the target sales price up to Rs.32 per unit. It is expected that the sales volume will also rise, inspite of the price rise, to 12,000 units.

In order to achieve the extra production capacity, however, the workforce must be able to reduce the time taken to make each unit of the product. It is proposed to offer a pay & productivity deal in which the wage rate per hour is increased to Rs.4. The hourly rate for variable overhead will be unaffected.

Compute the target labour time required to achieve the target profit.

c) Distinguish between Cost Reduction & Cost Control.

Q3) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) (i) A Company makes a single product which it sells at Rs.10 per unit. Fixed costs are Rs. 48,000 per month and the product have a contribution to sales ratio of 40%. In a period, when actual sales were Rs.1, 40,000, compute the company's margin of safety in units.

(ii) The following details relate to product P of a manufacturing company:

Level of activity (units)	**1000**	**2000**
Cost per unit (Rs.) :		
Direct Materials	4.00	4.00
Direct Labour	3.00	3.00
Production Overheads	3.50	2.50
Selling Overheads	1.00	0.50
Total	**11.50**	**10.00**

Compute total fixed cost and variable cost per unit.

b) Explain with examples different types of costs associated with quality of the product/ service.

c) Calculate Break Even Sales from the following information:

	Year I	Year II
Total Sales	₹ 20,000	₹ 30,000
Total Cost	₹17,600	₹ 21,600

Q4) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) (i) A company has capacity to produce 80,000 units and presently, it sells 20,000 units at Rs. 100 each. The demand is sensitive to selling price and it has been observed that every reduction of Rs.10 in selling price, the demand is doubled. What should be the target cost at full capacity, if margin on sales is taken at 25%?

(ii) The following are the cost data for two alternative ways of processing the clerical work for legal cases brought before the district court:

Particulars	**Semi-automatic**	**Fully automatic**
Monthly fixed costs (Rs.)		
Occupancy	15,000	15,000
Maintenance contract	5,000	10,000
Equipment lease	25,000	1,00,000
Unit variable cost (per report) (Rs.)		
Supplies	80	20
Labour	60	20

Compute the cost indifference point.

b) H Ltd. manufactures three products. The material cost, selling price and bottleneck resource details per unit are as follows:

Particulars	**Product X**	**Product Y**	**Product Z**
Selling price (Rs.)	66	75	90
Material & other variable cost (Rs.)	24	30	40
Bottleneck resource time (minutes)	15	15	20

Budgeted factory costs for the period are Rs. 2, 21,600. The bottleneck resource time available is 75,120 minutes per period. Required:

(i) Company adopted throughput accounting and products are ranked according to 'product return per minute'. Select the highest rank product.

(ii) Calculate throughput accounting ratio and comment on it.

c) A company manufactures three products using same plant and machinery. The important cost data relating to these products is given below for the year ended 31.12.2016.

(Rs.)

Particulars	**Product A**	**Product B**	**Product C**	**Total Cost**
Direct labour hours per unit	3.5	4.5	5.5	--
Direct labour cost	18,00,000	32,00,000	26,00,000	
Machine hours per unit	7.0	8.5	6.5	--
Indirect labour	--	--	--	42,00,000
Depreciation of machinery	--	--	--	35,00,000
Set-up costs	--	--	--	5,04,000
Order handling cost	--	--	--	1,44,000
Numbers of orders handled	55	45	35	
Number of set-ups	5	4	3	
No. of units produced	1000	1200	1500	

Calculate the absorption of production overheads to each product by using

i. Traditional costing method (by direct labour cost)
ii. Activity-Based Costing method (by suitable cost drivers)

Q5) ***Any two from (a) or (b) or (c) ———— (5x2) = 10 Marks***

a) Distinguish between Value Engineering & Value Analysis.
b) Write short note on “Kaizen Costing”.
c) List the steps involved in target costing process with the help of a block diagram. What are the advantages of target costing?

Q6) ***Any two from (a) or (b) or (c) ———— (5x2) = 10 Marks***

a) Mention ten application areas of Operation Research in Strategic Cost Management.
b) What is product life cycle costing? What are the costs that you would include in the product life cycle cost?
c) What is Business Process Re-engineering (BPR)? Explain the 3Rs model of BPR used by the organization to streamline its growing business.

Q7) ***Any two from (a) or (b) or (c) ———— (5x2) = 10 Marks***

a) Explain briefly the major components of a Balanced Scorecard.
b) Mention five areas of cost reduction. Also state five techniques to be adopted in cost reduction.
c) What are the advantages of Activity Based Costing?