VPM's
DR VN BRIMS, Thane
Program: PGDM (2018-20) (Finance)
Fourth Trimester Examination September 2019

Subject	**Strategic Cost Management**		
Roll No.		**Marks**	**60 Marks**
Total No. of Questions	**7**	**Duration**	**3 Hours**
Total No. of printed pages	**4**	**Date**	**03/10/2019**

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

Q. 1 (a) Neel 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, in spite 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. **5 marks**

(b) ABC Ltd. plans to use activity based costing to determine its product costs. It presently uses a single plant wide factory overhead rate for allocating factory overhead to products based on direct labour hours. The total factory overhead cost is as follows:

15 marks

Department	Factory Overhead (Rs.)
Production Support	12,25,000
Production (Factory Overhead only)	1,75,000
Total Cost	**14,00,000**

The company determined that it performed four major activities in the production support department. These activities, along with their budgeted costs are as follows:

Production Support Activities	Budgeted Cost (Rs.)
Set up	4,28,750
Production Control	2,45,000

Quality Control	1,83,750
Materials Management	3,67,500
Total	**12,25,000**

ABC Ltd. estimated the following activity-base usage quantities and units produced for each of its three products:

Products	Number of Units	Direct Labour Hours	Setups	Production Orders	Inspections	Material Requisitions
K	10,000	25,000	80	80	35	320
L	2,000	10,000	40	40	40	400
M	50,000	1,40,000	5	5	0	30
Total	62,000	1,75,000	125	125	75	750

Required:

(i) Determine the factory overhead cost per unit for products K, L and M under the single plant-wide factory overhead rate method. Use direct labour hours as the activity base.

(ii) Determine the factory overhead cost per unit for products K, L and M under the activity based costing.

(iii) Which method provides more accurate product costing? Why?

Attempt Any FOUR from the Remaining SIX Questions

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

a) 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.

b) If margin of safety is 40% of sales, find fixed costs when profit is Rs.20,000.

c) State ten areas of Cost Reduction.

Q3) ***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 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) (i) 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.

(ii) 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 has 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.

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) Write short note on "Kaizen Costing".
b) Explain with examples different types of costs associated with quality of the product/ service.
c) 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.

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

a) Distinguish between Value Engineering & Value Analysis.
b) Write a short Note on "Throughput Costing".
c) List the steps involved in target costing process. What are the advantages of target costing?

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

a) Mention any 5 business applications of marginal costing in Strategic Decision Making.
b) Explain the concept of Learning Curve Mechanism and explain its relevance in marginal costing.
c) What is Business Process Re-engineering (BPR)? Explain with examples.

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

a) Explain briefly the stages involved in the creation of a Balanced Scorecard.
b) State any 5 techniques to be employed for Cost Reduction.
c) A firm received an order to make and supply eight units of standard product which involves intricate labour operations. The first unit was made in 10 hours. It is understood that this type of operations is subject to 80% learning rate. The workers are getting a wage rate of Rs. 12 per hour.

i. What is the total time and labour cost required to execute the above order?
ii. If a repeat order of 24 units is also received from the same customer, what is the labour cost necessary for the second order?
