

**K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH,  
Vidyavihar, Mumbai- 400077  
Cost Modelling & Strategic Cost Management  
I TRIM END TERM EXAM**

**Maximum Marks: 50**

**Duration: 3 hours**

**Date: 05/12/2016**

**Instructions**

1. Attempt any five questions each carry 10 marks

**QUESTION 1:**

The budgeted overheads and cost driver volumes of Alpha are as follows.

<b>cost pool</b>	<b>Budgeted overhead</b>	<b>cost driver</b>	<b>Budgeted volume</b>
material procurement	580000	no of order	1100
material handling	250000	no of movements	680
setup	415000	no fo set ups	520
maintenance	970000	maintenance hours	8400
quality control	176000	no of inspects	900
machinery	720000	no of machine hrs	24000

The company has produced a batch of 2,600 components of AX-15, its material cost was Rs. 1,30,000 and labor cost Rs. 2,45,000. The usage activities of the said batch are as follows

Material orders – 26, maintenance hours – 690, material movements – 18, inspection – 28, set ups – 25, machine hours – 1800

Calculate – cost driver rates that are used for tracing appropriate amount of overheads to the said batch and ascertain the cost of batch of components using Activity Based costing

**Program:PGDM(Ex-Batch16-17), Endy Exam, Subject: Cost modelling and strategic cost management**

**Q.2**

Perspective	Critical success factors	Performance measures
Customer Focus	Acquire new customers	Percentage of defective products
Internal business process	Increase Shareholder value	Return on assets
Learning and Growth	Retain customers	Number of patents
Financial	Improve Manufacturing quality	Employee turnover rate
	Develop profitable customers	Net income
	Increase information system capabilities	Customer profitability
	Enhance employee skills	Return on sales
	On time delivery by vendors	Product cost per unit
	Increase profit generated by each salesperson	Profit per salesperson
		Percentage of error free invoices
		EPS
		Percentage of customers retained.

From the above jumbled details prepare a Balanced scorecard and add at least two new parameters under each section.

**Q3.** The Gowardhan company plans to sell 110000 units in the first quarter, 120000 units in the second quarter, 131000 units in the third quarter, 141000 units in the fourth quarter and 135000 units in the first quarter of the next year. At the beginning of the first quarter of the current year there were 20000 units of product in the stock. At the end of each quarter the company plans to have an inventory equal to one sixth of the next fiscal year and one fifth of extra inventory planned to meet adhoc demand. How many units must be manufactured in the current year?

**Q4.**

The cost of sale of production 'A' is made up as follows :-( Amount in thousands)

Material used in manufacturing	Rs 5,500
Material used in packing material	Rs 1,000
Material used in selling the product	Rs 150
Material used in the factory	Rs 175
Material used in the office	Rs 125
Labour required in production	Rs 1,000
Labour required for supervision in factory	Rs 200
Expenses direct factory	Rs 500

*Program:PGDM(Ex-Batch16-17), Endy Exam, Subject: Cost modelling and strategic cost management*

Expenses indirect factory	Rs 100
Expenses office	Rs 125
Depreciation of office building	Rs 75
Depreciation on factory plant	Rs 175
Selling expenses	Rs 350
Freight on material	Rs 500
Advertising	Rs 125
Tax payments	Rs 75
Donation to PM Relief fund	Rs 5

Assuming that all products manufactured and sold, what should be the selling price fixed to obtain a profit of 20% on selling price.

**Q5.**

A firm has a capacity to manufacture 15000 units of a product per annum. Presently, it produces 10000 units which are sold in the domestic market at Rs 25 per unit. The production cost per unit is as under

Material	Rs8
Labour	Rs6
Fixed overheads:	
Fixed	Rs 2
Variable	Rs1.5
Office overheads(F)	Rs1
Selling overheads:	
Fixed	Rs0.50
Variable	Rs1.00
Total	Rs 20

A foreign customer is interested in the product and he is willing to buy 5000 units (one order) but at a price of Rs 17.50 per unit. Should the order be accepted by the firm? If yes ,what possibly be the underlying assumptions? Will your advice be different if the price offered is at Rs 15 per unit?

**Q6**

Explain Target costing concept and its application by taking any two cases.