K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH, Vidyavihar, Mumbai- 400077

Program: *PGDM-IB (Batch2017-19), Trim-II*
Subject: Cost and Management Accounting
(End Term Examination)

Maximum Marks: 50 **Duration: 3 hours** **Date: 05/01/2018**

Instructions

1. **Question 1 is compulsory, carrying 10 marks.**
2. **Attempt any 4 questions from the remaining, each carrying 10 marks**

QUESTION 1

Joann Swanson owns and operates a restaurant. Her fixed costs are $17,000 per month. She serves luncheons and dinners. The average total bill (excluding tax and tip) is $18 per customer. Swanson's present variable costs average $9.50 per meal.
1. How many meals must she serve to attain a profit before taxes of $8,500 per month?
2. What is the break-even point in number of meals served per month?
3. Suppose Swanson's rent and other fixed costs rise to a total of $25,420 per month and variable
costs also rise to $11.40 per meal. If Swanson increases her average price to $22, how many
meals must she serve to make $8,500 profit per month?
4. Assume the same situation described in requirement 3. Swanson's accountant tells her she may lose 15% of her customers if she increases her prices. If this should happen, what would be Swanson's profit per month? Assume that the restaurant had been serving 3,000 customers per month.
5. Assume the same situation described in requirement 4. To help offset the anticipated 15% loss of customers, Swanson hires a pianist to perform for 4 hours each night for $2,300 per month.
Assume that this would increase the total monthly meals from 2,550 to 2,800. Would Swanson'stotal profit change? By how much?

QUESTION 2

Assume that Nantucket Nectars reports the following costs to make 17.5 oz. bottles for its juice cocktails:
Nantucket Nectars Company
Cost of Making 17.5-Ounce Bottles

	Total Cost for 10,00,000 Bottles	**Cost per Bottle**
Direct materials	$80,000	$.080
Direct labour	30,000	.030
Variable factory overhead	60,000	.060
Fixed factory overhead	85,000	.085
Total costs	$2,55,000	$.255

Another manufacturer offers to sell Nantucket Nectars the bottles for $.25. The capacity now used to make bottles will become idle if the company purchases the bottles. Further, one supervisor with a salary of $60,000, a fixed cost, would be eliminated if the bottles were purchased. Suppose Nantucket Nectars can use the released facilities in another manufacturing activity that makes a contribution to profits of $75,000 or can rent them out for $55,000. Prepare a schedule that compares the four alternative courses of action. Which alternative would yield the lowest net cost?

QUESTION 3

A factory engaged in manufacturing plastic buckets is working at 40% capacity and produces 10,000 buckets per month. The present cost breakup for one bucket is as under:

Materials	Rs.20
Labour	Rs. 16
Overheads	Rs20(60% fixed)

The selling price is Rs. 90 per bucket. If it is decided to work at 50% capacity, the selling price falls by 5%. At 90% capacity, the selling price falls by 10% accompanied by a similar fall in the price of materials. Prepare a statement showing the profits at 40%, 50% and 90% capacities and also determine the break even points at each of these production levels.

QUESTION 4

From the following forecasts of income and expenditure, prepare a Cash Budget for the three months ending on June, 2017:

Month	Sales	Purchase	Wages	Misc.
February	1,20,000	84,000	10,000	7,000
March	1,30,000	1,00,000	12,000	8,000
April	80,000	1,04,000	8,000	6,000
May	1,16,000	1,06,000	10,000	12,000
June	88,000	80,000	8,000	6,000

Additional information:

i. Sales: 30% realized in the month of sales, discount allowed 5%, balance realized equally in two subsequent months

ii. Purchases: These are paid in the month following supply.
iii. Wages: 25% paid in arrears in the following month
iv. Misc. expenses: Paid a month in arrears
v. Rent: Rs 1000 per month paid quarterly in advance, due in April
vi. Income tax: First instalment due in June- Rs 25,000
vii. Income from Investment: Rs 5,000 received quarterly in April, July, etc
viii. Cash in hand is Rs 5,000 on April 1,2016

QUESTION 5

A.Hamley Toy Company produced 13,000 stuffed bears. The standard direct-material allowance is 1.5 kilograms per bear, at a cost per kilo of $3.20. Actually, 18,700 kilos of materials (input) were used to produce the 13,000 bears (output).
Similarly, the standard allowance for direct labor is 5.1 hours to produce one bear, and the standard hourly labor cost is $6. But 67,100 hours (input) were used to produce the 13,000 bears.
Compute the quantity variances for direct materials and direct labor.

B. What is meant by cost drivers?
ii) What are the essential functions of Management accounting?

QUESTION 6

The product of a company passes through 3 distinct processes to completion. From past experience, it is ascertained that normal wastage in each process is as under:

Process	**A**	**B**	**C**
Wastage	2%	3%	2%
Sale value of wastage	Rs. 3 per unit	Rs. 4 per unit	Rs. 5 per unit

Expenses were as follows:

Process	**A**	**B**	**C**
Materials	26, 000	24, 000	35, 000
Direct Labour	27, 500	21, 000	23, 000
Manufacturing Expenses	15,000	14, 700	13, 300
Other factory expenses	8, 000	5, 500	5, 900

10, 000 units costing Rs. 24,000.were initially introduced in process A. Process wise output is as follows:

Output	Process
A	9,700
B	9,300
C	8,800

Prepare the three Process accounts.

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