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**Vidyavihar, Mumbai- 400077**

**Program: PGDM-FS (Batch2018-20), Trim-II**  
**Subject: Cost and Management Accounting**

**Maximum Marks: 50**

**Duration: 3 hours**

**Date: 10<sup>th</sup> January, 2019**

**Instructions**

**Q1 is compulsory, carrying 5 marks. Attempt any 3 questions from the remaining, each carrying 15 marks.**

Q1. Nike produces the Air Court tennis shoe and the Air Max running shoe. Assume that one factory is the only facility that produces the shoes and Nike managers must decide how many shoes of each type to produce. Machine time is the measure of capacity in this factory, and there is a maximum of 10,000 hours of machine time. The factory can produce 9 pairs of Air Court shoes or 6 pairs of Air Max shoes in 1 hour of machine time.

The selling price per unit of Air Court and Air Max are \$70 and \$130 respectively.

The variable costs per unit of Air Court and Air Max are \$ 48 and \$ 90 respectively.

Show with necessary calculations, the most profitable choice for the company.

Q2. 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**

	<b>Total Cost for 10,00,000 Bottles</b>	<b>Cost per Bottle</b>
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?

Q3. 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. **(7 marks)**

B. ) Lakers Company produces two products. The following information is available:

	Product X	Product Y
Selling price per unit	\$46	\$36
Variable cost per unit	\$38	\$24

Total fixed costs are \$234,000. Lakers plans to sell 21,000 units of Product X and 7,000 units of Product Y.

Required:

A) Compute the contribution margin for each product.

B) What is the expected net income?

C) Assume the sales mix is 3 units of Product X for every 1 unit of Product Y.

What is the break-even point in units for each product?

D) Assume the sales mix is 3 units of Product X for every 2 units of Product Y.

What is the break-even point in units for each product? **(8 marks)**

Q4. 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.

Q5. Lucky Ltd. intends to submit a tender. The following details are given:

	Rs
Stock of Finished goods as on 1-4-2017	77,500
Stock of Raw materials as on 1-4-2017	33,280
Stock of Finished goods as on 31-3-2018	95,000
Stock of Raw materials as on 31-3-2018	93,000
Purchase of raw materials	4,59,720
Office overhead expenses	37,500
Factory overhead expenses	70,000
Direct wages	2,80,000
Sales	9,62,500

You are required to prepare a Cost Sheet based on the above information. Using the percentage of Factory overheads to wages, office overheads to Works cost and the Net Profit percentage, you are required to prepare an estimated Cost Sheet on the basis of the following information:

1. Cost of raw materials to be used-Rs 80,000
2. Wages paid to workers – Rs40,000