

College Name: \_\_\_\_\_

Seat No: \_\_\_\_\_ Student's Name: \_\_\_\_\_

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**KARACHI UNIVERSITY BUSINESS SCHOOL**  
**UNIVERSITY OF KARACHI**  
**FINAL EXAMINATION DECEMBER 2017; AFFILIATED COLLEGES**  
**MANAGERIAL ACCOUNTING; BA(BS)-611**  
**BBA – VII**

**Date: January 8, 2018**

**Max Time: 100 Mins**  
**Max Marks: 40**

**INSTRUCTIONS:**

- 1. Attempt any 4 questions. Do not write anything on the question paper. EXCEPT the initials mentioned above.**
- 2. Mobile phones or any other communicating device will not be allowed in the examination room. Students will have to remove the batteries of these devices before entering the examination hall.**

**Q.1)** Sawaya Co., Ltd., of Japan is a manufacturing company whose total factory overhead costs fluctuate considerably from year to year according to increases and decreases in the number of direct labor-hours worked in the factory. Total factory overhead costs (in Japanese yen, denoted by ¥) at high and low levels of activity for recent years are given below:

	Level of Activity	
	Low	High
Direct labor-hours	5,000	6,000
Total factory overhead costs	¥4,250,000	¥4,500,000

The factory overhead costs above consist of indirect materials, rent, and maintenance. The company has analyzed these costs at the 5,000-hour level of activity as follows:

Indirect materials (Variable)	¥1,000,000
Rent (Fixed)	2,000,000
Maintenance (Mixed)	<u>1,250,000</u>
Total factory overhead costs	¥4,250,000

To have data available for planning, the company wants to break down the maintenance cost into its variable and fixed cost elements.

**Required:**

- a) Estimate how much of the ¥4,500,000 factory overhead cost at the high level of activity consists of maintenance cost.
- b) Using the high-low method of cost analysis, estimate a cost formula for maintenance.
- c) What total factory overhead costs would you expect the company to incur at an operating level of 5,200 direct labor-hours?

**Q.2)** Laraby Company produces a single product. It sold 25,000 units last year with the following results.

Sales	\$	625,000
Variable costs		375,000
Fixed costs		150,000
Income before taxes		100,000
Income taxes (45%)		45,000
After-tax profit		55,000

In an attempt to improve its product, Laraby's managers are considering replacing a component part that costs \$2.50 with a new and better part costing \$4.50 per unit during the coming year. A new machine would also be needed to increase plant capacity. The machine would cost \$18,000 and have a useful life of 6 years with no salvage value. The company uses straight-line depreciation on all plant assets.

**Required:**

- a) What was Laraby Company’s breakeven point in units last year?
- b) How many units of product would Laraby Company have had to sell in the past year to earn \$77,000 in profit?
- c) If Laraby Company holds the sales price constant and makes the suggested changes, how many units of product must be sold in the coming year to break even?
- d) If Laraby Company holds the sales price constant and makes the suggested changes, how many units of product will the company have to sell to make the same after-tax profit as last year?

**Q.3)** The following data are available for 2016 from the accounting records of Orient Company:

Units in beginning inventory	0
Units produced	20,000
Units in ending inventory	4,000
Selling price per unit	\$20
<b>Manufacturing costs</b>	
Direct materials (per unit)	\$4
Direct labor (per unit)	\$2
Variable overhead (per unit)	\$1
Fixed overhead (total)	\$60,000
<b>Selling and Administrative expenses</b>	
Variable (per unit)	\$3
Fixed (total)	\$40,000

**Required:**

- a) Compute the per unit using absorption costing and variable costing.
- b) Prepare an income statement under (i) absorption costing and (ii) variable costing.

**Q.4)** REX Co. Ltd. is to start production on 1st January 2018. The prime cost of a unit is expected to be Rs. 40 (Rs. 16 per materials and Rs. 24 for labour). In addition, variable expenses per unit are expected to be Rs. 8 and fixed expenses per month Rs. 30,000. Payment for materials is to be made in the month following the purchase. One-third of sales will be for cash and the rest on credit for settlement in the following month. Expenses are payable in the month in which they are incurred. The selling price is fixed at Rs. 80 per unit. The number of units to be produced and sold is expected to be:

January 900; February 1200; March 1800; April 2000; May 2,100 June 2400

**Required:**

Draw a Cash Budget indicating cash requirements from month to month.

**Q.5)** The estimated costs of producing 6,000 units of a component are:

	Per Unit	Total
Direct Material	\$10	\$60,000
Direct Labor	8	48,000
Applied Variable Factory Overhead	9	54,000
Applied Fixed Factory Overhead (\$1.5 per direct labor dollar)	12	72,000
	<u>\$39</u>	<u>\$234,000</u>

The same component can be purchased from market at a price of \$29 per unit. If the component is purchased from market, 25% of the fixed factory overhead will be saved.

**Required:**

Decide whether to make this product or buy this product from the market. Show computations.

**END OF SUBJECTIVE PAPER**