College Name: $\qquad$

Student Name: $\qquad$ Seat No: $\qquad$

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## KARACHI UNIVERSITY BUSINESS SCHOOL <br> UNIVERSITY OF KARACHI <br> FINAL EXAMINATION DECEMBER 2016; AFFILIATED COLLEGE MANAGERIAL ACCOUNTING; BA (M)-602 (PART B) MBA-IV

Date: January 9, 2017
INSTRUCTIONS:
Max Time: 2 Hrs
Max Marks: 40

1. Attempt any 4 Questions. Do not write anything on the question paper.
2. Mobile Phone(s) 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.

Q1 Brewer \& Carr, PSC is an architectural firm that uses activity-based costing. The three activity cost pools used by Brewer \& Carr are: Salaries and Wages, Travel Expense, and Plan Reproduction Expense. The firm has provided the following information concerning activity and costs:

| Salaries and wages | $\$ 360,000$ |
| :--- | :--- |
| Travel expense | 100,000 |
| Plan reproduction expense | $\underline{120,000}$ |
| Total | $\underline{\$ 580,000}$ |


|  | Activity Cost Pools |  |  |
| :--- | :--- | :--- | :--- |
|  | Project <br> Assignment | Business <br> Development | $\underline{\text { Other }}$ |
| Salaries and wages | $\underline{60 \%}$ | $30 \%$ | $10 \%$ |
| Travel expense | $40 \%$ | $40 \%$ | $20 \%$ |
| Plan reproduction expense | $35 \%$ | $40 \%$ | $25 \%$ |

## Required

Calculate the total cost to be allocated to the (a) Project Assignment, (b) Business Development, and (c) Other activity cost pools.

Q2 An investment banker is analyzing two companies that specialize in the production and sale of gourmet cappuccino and chai mixes. Fireside Company uses a labor-intensive approach and Stirring Moments Company uses a mechanized system. Variable costing income statements for the two companies are shown below:

|  | $\underline{\text { Fireside }}$ | $\underline{\text { Stirring Moments }}$ |
| :--- | :--- | :--- |
| Sales | $\$ 1,000,000$ | $\$ 1,000,000$ |
| Variable costs | $\underline{650,000}$ | $\underline{300,000}$ |
| Contribution margin | 350,000 | $\underline{700,000}$ |
| Fixed costs | $\underline{150,000}$ | $\underline{\$ 200,000}$ |
| Net Income | $\underline{\$ 200,000}$ |  |

The investment banker is interested in acquiring one of these companies. However, she is concerned about the impact that each company's cost structure might have on its profitability.

## Required

(a) Calculate each company's degree of operating leverage.
(b) Determine the effect on each company's net income if sales decrease by $10 \%$ and if sales increase by 20\%. Do not prepare income statements.

Forrest Painting Service has budgeted the following time and material for 2008:

|  | BUDGETED COSTS FOR 2008 <br> Time |  |
| :--- | :--- | :--- |
| Times <br> Charges | Charges |  |
| Painters' wages and benefits | $\$ 36,000$ |  |
| Service manager's salary and benefits |  | $\$ 21,000$ |
| Office employee's salary and benefits | 12,000 | 3,000 |
| Cost of paint |  | 50,000 |
| Overhead (supplies, utilities, etc.) | $\underline{16,000}$ | $\underline{8,500}$ |
| Total budgeted costs | $\$ 64,000$ | $\$ 82,500$ |

Forrest budgets 4,000 hours of paint time in 2008 and will charge a profit of $\$ 12$ per hour, in addition to a $30 \%$ markup on the cost of paint.

On February 15, 2008, Forrest is asked to prepare a price estimate to paint a building. Forrest estimates that this job will take 12 labor hours and $\$ 600$ in paint.

## Required

1. Compute the labor rate for 2008.
2. Compute the material loading charge rate for 2008.
3. Prepare a time-and-material price estimate for painting the building.

Q4 Fagan Company uses a flexible budget for manufacturing overhead based on machine hours. Variable manufacturing overhead costs per machine hour are as follows:

| Indirect labor | $\$ 5.00$ |
| :--- | :--- |
| Indirect materials | 2.50 |
| Maintenance | 0.50 |
| Utilities | 0.30 |

Fixed overhead costs per month are:

| Supervision | $\$ 600$ |
| :--- | :--- |
| Insurance | 200 |
| Property taxes | 300 |
|  | Depr |

The company believes it will normally operate in a range of 2,000 to 4,000 machine hours per month.

## Required

Prepare a flexible manufacturing overhead budget for the expected range of activity, using increments of 1,000 machine hours.

Q5 Novakovich Inc., a manufacturing company, has provided the following financial data for January:

| Sales | $\$ 430,000$ |
| :--- | :--- |
| Variable production expense | $\$ 84,000$ |
| Variable selling expense | $\$ 16,000$ |
| Variable administrative expense | $\$ 28,000$ |
| Fixed production expense | $\$ 102,000$ |
| Fixed selling expense | $\$ 44,000$ |
| Fixed administrative expense | $\$ 121,000$ |

The company had no beginning or ending inventories.

## Required:

1. Prepare an income statement in good form for January using the traditional approach.
2. Prepare an income statement in good form for January using the contribution approach.
