College Name: $\qquad$

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

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# KARACHI UNIVERSITY BUSINESS SCHOOL UNIVERSITY OF KARACHI FINAL EXAMINATION DECEMBER 2016; AFFILIATED COLLEGE MANAGERIAL ACCOUNTING; BA (H)-562 (PART B) BBA - VI 

Date: January 14, 2017
Max Time: 2 Hrs
Max Marks: 40

## INSTRUCTIONS:

1. Attempt any $\mathbf{4}$ questions. Do not write anything on the question paper.
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.

Q1 The controller for Shakeel Machining has established the following overhead cost pools and cost drivers:

|  | Budgeted |  |
| :---: | :---: | :---: |
| Overhead Cost Pool | Overhead Cost | Cost Driver |
| Machine setups | Rs 240,000 | Number of setups |
| Material handling | 90,000 | Units of raw material |
| Quality control inspection | 48,000 | Number of inspections |
| Other overhead costs | 160,000 | Machine hours |
| Total | Rs 538,000 |  |
| Overhead Cost Pool | Budgeted Level for Cost Driver | Overhead Rate |
| Machine setups | 200 setups | Rs 1,200 per setup |
| Material handling | 60,000 units | Rs 1.50 per unit |
| Quality control | 1,200 inspections | Rs 40 per inspection |
| Other overhead | 20,000 machine hours | Rs 8 per machine hour |

Order no. 715 has the following production requirements:
Machine setups: 7
Raw material: 11,200 units
Inspections: 16
Machine hours: 850

## Required:

a) Compute the total overhead that should be assigned to order no. 715 by using activity-based costing.
b) Suppose that Shakeel were to use a single, predetermined overhead rate based on machine hours. Compute the rate per hour and the total overhead assigned to order no. 715.
c) Discuss the merits of an activity-based costing system in comparison with a traditional costing system.

Q2 Hanif Hospital contains $\mathbf{4 5 0}$ beds. The average occupancy rate is $\mathbf{8 0 \%}$ per month. In other words, on average, $\mathbf{8 0 \%}$ of the hospital's beds are occupied by patients. At his level of occupancy the hospital's operating costs are Rs $\mathbf{3 2}$ per occupied bed per day assuming a 30 -day month. This Rs 32 figure contains both variable and fixed cost elements.
During June, the hospital's occupancy rate was only $\mathbf{6 0 \%}$. A total of Rs $\mathbf{3 2 6 , 7 0 0}$ in operating cost was incurred during the month.

## Required:

1. Using the high-low method estimate:
a) The variable cost per occupied bed on a daily basis.
b) The total fixed operating cost per month.
2. Assume an occupancy rate of $\mathbf{7 0 \%}$ per month. What amount to total operating cost would you expect the hospital to incur?

Q3 Ebad Company installs lawn sod in home yards. The company's most recent monthly contribution format income statement follows:

|  | Amount | Percentage of Sales |
| :--- | :--- | :---: |
| Sales | Rs 80,000 | $100 \%$ |
| Variable expenses | $\underline{32,000}$ | $\underline{40 \%}$ |
| Contribution margin | $\underline{48,000}$ | $\underline{60 \%}$ |
| Fixed expenses | $\underline{38,000}$ |  |
| Net operating income | $\underline{\underline{10,000}}$ |  |

## Required:

1. Compute the company's degree of operating leverage
2. Using the degree of operating leverage, estimate the impact on net operating income of a 5\% increase in sales.
3. Verify your estimate from part (2) above by constructing a new contribution format income statement for the company assuming a $\mathbf{5 \%}$ increase in sales.

Q4 The Saleem \& Jamal Company manufactures an engine for carpet cleaners called the "Snooper." Budgeted cost and revenue data for the "Snooper" are given below, based on sales of 40,000 units.

| Sales | Rs $1,600,000$ |
| :--- | ---: |
| $1,120,000$ |  |
| Less: Cost of goods sold | Rs 480,000 |
| Gross margin | 100,000 |
| Less: Operating expenses | $\underline{\text { Rs }} 380,000$ |
| Net income |  |

Cost of goods sold consists of Rs 800,000 of variable costs and Rs 320,000 of fixed costs. Operating expenses consist of Rs 40,000 of variable costs and Rs 60,000 of fixed costs.

## Required:

a) Calculate the break-even point in units and sales rupees.
b) Calculate the safety margin.
c) Saleem \& Jamal received an order for 6,000 units at a price of Rs 25.00 . There will be no increase in fixed costs, but variable costs will be reduced by Rs 0.54 per unit because of cheaper packaging. Determine the projected increase or decrease in profit from the order.

Q5 Imran Company has the following historical collection pattern for its credit sales:
$70 \%$ collected in month of sale
$15 \%$ collected in the first month after sale
$10 \%$ collected in the second month after sale
$4 \%$ collected in the third month after sale
$1 \%$ uncollectible

Budgeted credit sales for the last six months of the year follow.

| July | Rs 30,000 |
| :--- | :--- |
| August | 35,000 |
| September | 40,000 |
| October | 45,000 |
| November | 50,000 |
| December | 42,500 |

## Required:

a) Calculate the estimated total cash collections during October.
b) Calculate the estimated total cash collections during the year's fourth quarter.

