

**K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH**

**Program:PGDM (Core) , 2nd Trimester (Batch 2017-2019)**

**Subject: Cost and Management Accounting  
(End Trimester examination)**

**Maximum Marks: 100**

**Duration: 3 hours**

**Date: 2<sup>nd</sup> January 2018**

**Notes:**

- 1. All questions carry equal marks**
- 2. Answer all questions**
- 3. Make suitable assumptions if required and state them**
- 4. It is an OPEN NOTES examination and students are allowed to use ONLY OWN notebooks and calculators.**

**Question 1**

You have just been hired by EduRom Company, which was organized on January 2 of the current year. The company manufactures and sells a variety of educational DVDs for personal computers. It is your responsibility to supervise the employees who take orders from customers over the phone and to arrange for shipping orders via Federal Express, UPS, and other freight carriers.

The company is unsure how to classify your annual salary in its cost records. The company's cost analyst says that your salary should be classified as a manufacturing (product) cost; the controller says that it should be classified as a selling expense; and the president says that it doesn't matter which way your salary cost is classified.

Required:

- a. Which viewpoint is correct and why?
- b. From the point of view of the reported net operating income for the year, is the president correct in saying that it doesn't matter which way your salary cost is classified? Explain

**Question 2**

Range Manufacturing produces two different models of cameras. One model has an automatic focus, whereas the other requires the user to determine the focus. The two products are produced in batches. Each time a batch is produced, the equipment must be configured (set up) for the specifications of the camera model being produced. The manual-focus camera requires more parts than the automatic-focus model. The manual focus model is also more labor-intensive, requiring much more assembly time but less machine time. Although the manual model is more labor-intensive, the machine configuration required for this product is more complex, causing the manual model to consume more of the setup activity resources than the automatic camera. Many, but not

all, of the parts for the two cameras are purchased from external suppliers. Because it has more parts, the manual model makes more demands on the purchasing and receiving activities than does the automatic camera. Range currently assigns only manufacturing costs to the two products. Overhead costs are collected in one plantwide pool and are assigned to the two products in proportion to the direct labor hours used by each product. All other costs are viewed as period costs. Range budgets costs for all departments within the plant—both support departments like maintenance and purchasing and production departments like machining and assembly. Departmental managers are evaluated and rewarded on their ability to control costs. Individual managerial performance is assessed by comparing actual costs with budgeted costs.

Required:

1. Is Range using a functional-based or an activity-based cost management system? Explain.
2. Assume that you want to design a more accurate cost accounting system. What changes would you need to make? Be specific. Explain why the changes you make will improve the accuracy of cost assignments.

### **Question 3**

“For a student, a grade of 65 percent is nothing to write home about. But for the Airline industry, filling 65 percent of the seats is the difference between profit and loss. The economy might be just strong enough to sustain all the carriers on a cash basis, but not strong enough to bring any significant profitability to the industry. For the airlines, the emphasis will be on trying to consolidate routes and raise ticket prices”

The airline industry is notorious for boom and bust cycles. Why is airline profitability very sensitive to these cycles? Do you think that during a down cycle the strategy to consolidate routes and raise ticket prices is reasonable? What would make this strategy succeed or fail? Why?

### **Question 4**

Agora Company normally produces and sells 49,000 units of XZ-24 each month. XZ-24 is a small electrical component part used in the automotive industry. The selling price is Rs. 45 per unit, variable costs are Rs. 20 per unit, fixed manufacturing overhead costs total Rs. 225,000 per month, and fixed selling costs total Rs. 305,000 per month.

Employment-contract strikes in the companies that purchase the bulk of the XZ-24 units have caused Agora Company's sales to temporarily drop to only 13,000 units per month. Agora Company estimates that the strikes will last for two months, after which time sales of XZ-24 should return to normal. Due to the current low level of sales, Agora Company is thinking about closing down its own plant during the strike, which would reduce its fixed manufacturing overhead costs by Rs. 66,000 per month and its fixed selling costs by 11%. Start-up costs at the end of the shutdown period would total Rs. 12,000. Because Agora Company uses Lean Production methods, no inventories are on hand.

(a) Assuming that the strikes continue for two months, compute the increase or decrease in income in closing the plant.

(b) At what level of sales (in units) for the two-month period should Agora Company be indifferent between closing the plant or keeping it open?

### **Question 5**

As a preliminary to requesting budget estimates of sales, costs, and expenses for the fiscal

year beginning January 1, 2017, the following tentative trial balance as of December 31, 2016, is prepared by the Accounting Department of Red Publishing Co.:

Cash	Rs. 118,600
Accounts Receivable	232,400
Finished Goods	148,900
Work in Process	32,700
Materials	52,500
Prepaid Expenses	4,000
Plant and Equipment	580,000
Accumulated Depreciation—Plant and Equipment	251,000
Accounts Payable	182,500
Common Stock, Rs. 15 par	450,000
Retained Earnings	285,600

Factory output and sales for 2017 are expected to total 32,000 units of product, which are to be sold at Rs. 100 per unit. The quantities and costs of the inventories at December 31, 2017, are expected to remain unchanged from the balances at the beginning of the year.

Budget estimates of manufacturing costs and operating expenses for the year are summarized as follows:

	Estimated Costs and Expenses	
	Fixed (Total for Year)	Variable (Per Unit Sold)
Cost of goods manufactured and sold:		
Direct materials	—	Rs.25.00
Direct labor	—	7.80
Factory overhead:		
Depreciation of plant and equipment	Rs. 32,000	—
Other factory overhead	10,000	4.50
Selling expenses:		
Sales salaries and commissions	115,000	12.80
Advertising	112,400	—
Miscellaneous selling expense	8,400	2.00
Administrative expenses:		
Office and officers salaries	75,400	6.25
Supplies	3,900	1.00
Miscellaneous administrative expense	2,000	1.50
Balances of accounts receivable, prepaid expenses, and accounts payable at the end		

of the year are not expected to differ significantly from the beginning balances. Income tax of Rs. 280,000 on 2017 taxable income will be paid during 2017. Regular quarterly cash dividends of Rs. 1.50 a share are expected to be declared and paid in March, June, September, and December on 30,000 shares of common stock outstanding. It is anticipated that fixed assets will be purchased for Rs. 170,000 cash in May.

Instructions

1. Prepare a budgeted income statement for 2017
2. Prepare a budgeted balance sheet as of December 31, 2017

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