

PGDM 2014
Managerial Accounting
DM 204

Trimester – II End-Term Examination: December 2014

Time allowed: 2 hrs 30 min

Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. In case of rough work please use answer sheet.

Make assumptions wherever necessary and write them down at the end of solution.

Section A: Attempt 3 out of 5 questions; each question is of 5 marks

A1: During 2013, AB Ltd showed a profit of Rs 1,80,000 on a sale of Rs 3,00,000. The variable expenses were 21,00,000

What are the breakeven sales at present, what will it be if variable cost increase by 5 percent?

What will be the break even sale to maintain the present profit, if the selling price is reduced by 5 percent?

A2: Why are sunk costs not relevant in decision making, explain with example?

A3: Which method is better for measuring the financial performance of the divisions, Justify?

A4: In a period, opening stock were 12,600 units and closing stock were 14100 units. The profit based on Marginal Costing was Rs 50,400 and profit using absorption costing is Rs 60,150. What is the fixed Overhead absorption rate per unit?

A5: Big Bubble provided the following list of cost data related to its manufacturing operations for the month of October 2014.

Beginning raw materials inventory INR 2,416,000

Raw materials purchased (net) 5,863,750

Ending raw materials inventory 2,045,500

Direct labor costs 805,750

Indirect materials 313,750

Indirect labor 222,250

Factory utilities and maintenance 1,140,000

Factory depreciation 141,500

Other factory related overhead 61,000

Beginning work in process 1,942,500

Ending work in process 1,792,500

a) Arrange the cost data into a statement of cost of goods manufactured.

b) If Big Bubble's cost of goods sold for the month was INR10,000,000, how much was the increase or decrease in finished goods inventory for the month of October?

Section B: Attempt 2 out of 3 questions; each question is of 10 marks

B1: From the following particulars of a firm, prepare a cash budget for the six months, January – June. Also mention the advantages of making cash budget.

Balance sheet as on December 31

Liabilities	Amt(in rs)	Assets	Amt(in rs)
Share capital	10,000	Cash	16,000
Reserves	90,000	Account Receivables	10,000
		Inventory	49,000
		Fixed Assets 30,000	25,000
		Less: Dep 5,000	
	1,00,000		1,00,000

Sales Forecast

January	20,000	April	60,000
February	40,000	May	90,000
March	50,000	June	50,000
		July	10,000

Salary expenses

January	3,000	April	9,000
February	5,000	May	11,000
March	7,000	June	6,000

- A. Monthly selling and distribution expenses are expected to be 10% of sales. Depreciation charges are 1% per month.
- B. The firm operates on the following terms:
- Sales are on a 30 day basis. But payments are not received until the following month.
 - All purchases of the firm are in cash
 - The firm purchases enough inventory each month to cover 125 % of the following month's sales. The firm has a policy of maintaining 20% gross profit margin on sales.
 - A minimum cash balance of Rs. 10,000 is maintained
- C. Additional information: New equipment purchased for Rs. 5,000 is scheduled for delivery on March 1 against payment.

B2: Bronson Company manufactures a variety of ballpoint pens. The company has just received an offer from an outside supplier to provide the ink cartridge for the company's Zippo pen line, at a price of \$0.48 per dozen cartridges. The company is interested in this offer, since its own production of cartridges is at capacity.

Bronson Company estimates that if the supplier's offer were accepted, the direct labor and variable manufacturing overhead costs of the Zippo pen line would be reduced by 10% and the direct materials cost would be reduced by 20%.

Under present operations, Bronson Company manufactures all of its own pens from start to finish. The Zippo pens are sold through wholesalers at \$4 per box. Each box contains one dozen pens. Fixed manufacturing overhead costs charged to the Zippo pen line total \$50,000 each year. (The same equipment and facilities are used to produce several pen lines.) The present cost of producing one dozen Zippo pens (one box) is given below:

Direct materials	\$1.50
Direct labor	1.00
Manufacturing overhead	0.80 *
Total cost	\$3.30

*Includes both variable and fixed manufacturing overhead, based on production of 100,000 boxes of pens each year.

Required:

1. Should Bronson Company accept the outside supplier's offer? Show computations.
2. What is the maximum price that Bronson Company should be willing to pay the outside supplier per dozen cartridges? Explain.

B3: Retro Company manufactures a product that is available in both a deluxe model and a regular model. The company has manufactured the regular model for years. The deluxe model was introduced several years ago to tap a new segment of the market. Since introduction of the deluxe model, the company's profits have steadily declined, and management has become increasingly concerned about the accuracy of its costing system. Sales of the deluxe model have been increasing rapidly.

Manufacturing overhead is assigned to products on the basis of direct labor-hours. For the current year, the company has estimated that it will incur INR 6,000,000 in manufacturing overhead cost and produce 15,000 units of the deluxe model and 120,000 units of the regular model. The deluxe model requires 1.6 hours of direct labor time per unit, and the regular model requires 0.8 hours. Material and labor costs per unit are as follows:

	Model	
	Deluxe	Regular
Direct materials	INR 154	112
Direct labor	INR 16	8

Management is considering using activity-based costing to apply manufacturing overhead costs to products for external financial reports. The activity-based costing system would have the following four activity cost pools:

Activity Cost Pool	Activity Measure	Estimated Overhead Costs
Purchase orders	Number of purchase orders	INR 252,000
Scrap/rework orders	Number of scrap/rework orders	648,000
Product testing	Number of tests	1,350,000
Machine related	Machine-hours	3,750,000
Total overhead cost		INR 6,000,000

Activity Measure	Expected Activity		
	Deluxe	Regular	Total
Number of purchase orders	400	800	1,200
Number of scrap/rework orders	500	400	900
Number of tests	6,000	9,000	15,000
Machine-hours	20,000	30,000	50,000

Required:

1. Using direct labor-hours as the base for assigning manufacturing overhead cost to products, compute the predetermined overhead rate. Using this rate and other data from the problem, determine the unit product cost of each model.
2. Compute activity based overhead rates and determine the unit cost of each model.

Section C: Compulsory Case Study 15 Marks

Huntington Beach Case Study

This was a fixed-price, not a cost-based, contract, but we then changed the length of the road. Our mistake was not to have prepared an amended contract, but we've worked with this contractor before, and we trust him. Nevertheless, fair is fair and we needed to determine how much of the cost overrun each of us should bear. Sometime before tomorrow, I need to prepare a more thorough analysis of the reasons for the variance.

The speaker was Matthew Cohan, Assistant Commissioner of the Department of Public Works of Huntington Beach, South Carolina. He was reviewing the results of a

recently completed construction project on Huntington Avenue, a beach front road. The project, which had been completed under a contract with a private developer, had run considerably over budget, and Mr. Cohan wished to determine the reasons for the excessive expenditures.

Because the actual length of the road had exceeded the city's original estimate, Mr. Cohan knew the contractor would be entitled to some additional compensation from the city. However, he also realized that not all of the extra costs could be attributed to the additional length and had, there-fore, asked his accountant to prepare a summary of the reasons for the deviation from the budget.

While the accountant's summary (Exhibit 1) shed some light on the reasons for the \$36,080 variance, Mr. Cohan was convinced that it did not tell the full story. He knew, for example, that the city had asked the contractor to extend the length of the road by a half mile (880 yards). He also knew that, because of material wastage, the road had required 21 rather than 20 square yards of asphalt per linear yard. Further, in his discussions with the contractor, he had learned that the efficiency of the paving crew had increased by a factor of 20 percent, resulting in some apparent savings which did not show up on the accountant's report. Finally, since the contractor had given his grading crew a wage increase, the cost per linear yard of grading had increased from \$12 to \$15.

Mr. Cohan had a meeting the next day with the contractor to determine the additional amount the city would owe. He realized that there were several issues that needed to be addressed at that meeting, and that the contractor would be expecting some additional payments.

Required:

1. Compute the relevant variances. What do they show that the accountant's report does not?
2. What additional information would you suggest Mr. Cohan obtain about this project? Why?
3. How much more should the city pay? How much should the contractor be asked to absorb?

HUNTINGTON BEACH
Exhibit 1. Summary of Budget Variations

	Rate	Quantity	Cost
Grading			
Actual	\$15 per linear yard	5280 linear yards	\$79,200
Budget	\$12 per linear yard	4400 linear yards	\$52,800
Variance			(\$26,400)
Paving			
Actual	\$8 per linear yard	110,880 square yards	\$887,040
Budget	\$10 per linear yard	88,000 linear yard	8,80,000
Variance			(\$7,040)
Overhead			
Actual	\$3 per linear yard	5280 linear yards	\$15,840
Budget	\$3 per linear yard	4400 linear yards	13,200
Variance			(\$2,640)