



Institute of Management
JK Lakshmipat University
Jaipur



END TERM EXAMINATION 2014

MBA (FT) Sem-II
MM: 50 Marks

Course: Cost & Management Accounting
Time: 3 Hours
Subject code: MBA206

Instructions: Attempt any three questions from Section A. Section B is compulsory.

Section A

All questions carry equal marks of 10.

Q1. Answer the following –

- XYZ Co. Ltd. is having 400 workers at the beginning of the year and 500 workers at the end of the year. During the year 20 workers were discharged and 15 workers left the company. Find out the Labor Turnover rate under 'separation method'.
- A company maintains a margin of safety of 25% on its current sales and earns a profit of ` 30 lakhs per annum. If the company has a p/v ratio of 40% then what is its current sales.
- The annual demand of a certain product is 8000 units, ordering cost per order is ` 40, carrying cost is 10% of average inventory value and purchase cost is ` 10 per unit. Calculate the EOQ for the product.
- Standard time is 60 hours and guaranteed time rate is ` 50 per hour. Under Rowan Plan, what is the amount of wages, if job is completed in 48 hours?
- Total cost of 2000 units is ` 32000 and for 3200 units is ` 38,000. Calculate the amount of fixed cost.

Q2. The Standard cost of a Chemical mixture is:

40% of material A at Rs. 20 per kg and 60% of material B at Rs. 30 per kg.

A Standard loss of 10% is expected in production.

During a period, the actual material used:

90kgs Material A at a cost Rs. 18 per kg.

110 kgs material B at a cost of Rs. 34 per kg.

The weight produced is 182kgs. of good product. Calculate:-

- Material price variance
- Material mix variance
- Material yield variance
- Material cost variance

Q3. PH Ltd is a manufacturing company having three production departments, A, B, C and two service departments, X and Y. The following is the budget for March, 2016.

	Production Departments			Service Departments	
	A	B	C	x	y
Direct Material	1,000	2,000	4,000	2,000	1,000
Direct Wages	5,000	2,000	8,000	1,000	2,000
Rent- 4,000					
Power- 2,500					
Depreciation – 1,000					
Other overheads – 9,000					
Additional Information:					
Area (Sq.ft)	500	250	500	250	500
Capital Value	20	40	20	10	10
Machine Hours	1,000	2,000	4,000	1,000	1,000
H.P of Machines	50	40	20	15	25

A technical assessment for the apportionment of expenses of service department is as under:

Total	A	B	C	X	Y
Service Dept X	45%	15%	30%	-	10%
Service Dept Y	60%	35%	-	5%	-

You are required to show:-

- A statement showing distribution of overheads to various departments.
- A Statement showing distribution of service department expenses to the production departments.
- Machine hour rates of the production departments : A, B, and C.

Q4. What will be the earnings of a worker at 55 paise per hour when he takes 140 hours to do a volume of work for which the standard time allowed is 200 hours. The plan of payment of bonus on a sliding scale is as under:

- Within the first 10% saving in standard time, the bonus is 40% of time saved.
- Within the second 10% saving in standard time, the bonus is 50% of the time saved.
- Within the third 10% saving in standard time, the bonus is 60% of the time saved.
- Within the fourth 10% saving in standard time, the bonus is 70% of the time saved.
- For the rest the bonus is 75% of the time saved.

Q5. Write short notes on any 3 .

- Zero based budgeting
- Activity based costing
- Kaizen Costing
- Types of Budget



Section B

Usha Company manufactures and sells adjustable canopies that attach to motor homes and trailers. The market covers both new unit purchases as well as replacement canopies. Usha developed its 2006 business plan based on the assumption that canopies would sell at a price of Rs. 400 each. The variable costs for each canopy were projected at Rs. 200 and the annual fixed costs were budgeted at Rs.1,00,000. Usha's after tax-profit objective was Rs 2,40,000; the company's effective tax rate is 40%.

While Usha's sales usually rise during the second quarter, the May financial statements reported that sales were not meeting expectations. For the first five months of the year, only 350 units had been sold at the established price, with variable costs as planned, and it was clear that the 2006 after tax-profit projection would not be reached unless some actions were taken. Usha's President assigned a management committee to analyze the situation and develop several alternative course of action. The following mutually exclusive alternatives, labeled, A, B, and C, were presented to the president.

- (a) Reduce Sales price by Rs. 40. The sales organization forecasts that with the significantly reduced sales price, 2700 units can be sold during the remainder of the year. Total fixed and variable unit cost will stay as budgeted.
- (b) Lower the variable costs per unit by Rs.25 through the use of less expensive materials and slightly modified manufacturing techniques. The sales price will also be reduced by Rs. 30, and sales of 2,200 units for the remainder of the year are forecast.
- (c) Cut fixed Costs by Rs. 10,000, and lower the sales price by 5%. Variable costs per unit will be unchanged. Sales of 2,000 units are expected for the remainder of the year.

In the light of the above information:-

- 1. Determine the number of units that Usha Company must sell in order to break even, assuming no changes are made to the selling price and cost structure.
- 2. Determine the number of units that Usha Company must sell in order to achieve its after-tax profit objective.
- 3. Determine which of the alternatives Usha Company should select to achieve its annual after tax profit objective. Be sure to support your selection with appropriate calculations.
- 4. The precision and reliability of CVP analysis are limited by several underlying assumptions, Identify at least four of these assumptions.