## **GUJARAT TECHNOLOGICAL UNIVERSITY**

MBA - SEMESTER-II • EXAMINATION - SUMMER • 2014

Subject Code: 2820001 Date: 20-05-2014

**Subject Name: Cost and Management Accounting (CMA)** 

Time: 10.30 am - 13.30 pm Total Marks: 70

**Instructions:** 

Seat No.:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- 4. Each question carry equal marks (14 marks)
- Q.1 (a) What do you mean by Job Costing? Under what conditions, it is suitable? How batch costing is different from it?
  - **(b)** Thal Ltd. had budgeted the following sales for a month:

Chemical A: 900 units @ Rs. 50 per unit

Chemical B: 650 units @ Rs. 100 per unit

Chemical C: 1,200 units @ Rs. 75 per unit

As against this, the actual sales were:

Chemical A: 1000 units @ Rs. 55 per unit

Chemical B: 700 units @ Rs. 95 per unit

Chemical C: 1,100 units @ Rs. 78 per unit

The costs per unit of Chemical A, B and C were Rs. 45, Rs. 85 and Rs. 65 respectively.

You are required to calculate:

- (i) Total Sales Margin Variance.
- (ii) Sales Margin Variance Due to Price.
- (iii) Sales Margin Variance Due to Volume.
- (iv) Sales Margin Variance Due to Sales Mix.
- (v) Sales Margin Variance Due to Sales Quantities.
- Q.2 (a) "Marginal Costing is a valuable technique to the management". Critically evaluate and discuss the limitations of marginal costing.
  - (b) A manufacturing company has two departments: A and B. Department A transfers most of its production to B. The variable cost of the product is Rs. 15 per unit and the fixed cost is Rs. 7.5 per unit. Examine the economics of transferring to B at total cost plus 25 % in conjunction with the other available methods for the purpose.

The market price of the product is Rs. 27.5 per unit. Department B has an additional processing and marketing cost of Rs. 25 per unit. It can sell the product in the open market at Rs. 55 per unit. If both the departments agree to a negotiated price of Rs. 23.5 per unit, compute the difference.

OR

- (b) What do you understand by flexible budget? Difference between fixed budget 07 and flexible budget.
- Q.3 (a) What is Boiler House Costing? Draw a specimen cost sheet for Boiler House 07 Costing with imaginary figures.

**07** 

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07

**(b)** Electronics Ltd. furnish the following information for 10,000 T.V. values manufactured during the year 2012:

Particulars	Amount (in Rs.)
Direct Materials	90,000
Direct Wages	60,000
Power and Consumable Stores	12,000
Factory Indirect Wages	15,000
Factory Lighting	5,500
Defective Work (Cost of rectification)	3,000
Clerical Salaries and Management Expenses	33,500
Selling Expenses	5,500
Sale Proceeds of Scrap	2,000
Plant Repairs and Maintenance	11,500

The net selling price was Rs. 31.60 per unit sold and all units were sold. As from 1<sup>st</sup> January, 2013 the selling price was reduced to Rs. 31 per unit. It was estimated that production could be increased in 2013 by 50 % due to spare capacity. Rates for materials and direct wages will increase by 10 %.

You are required to prepare:

- (i) Cost Sheet for the year 2012 showing various elements of cost per unit, and
- (ii) Estimated Cost and Profit for 2013 assuming that 15,000 units will be produced and sold during the year and factory overheads will be recovered as a percentage of direct wages and office and selling expenses as a percentage of work cost.

## OR

- Q.3 (a) Explain Normal Loss, Abnormal Loss and Abnormal Gain with an example under process costing.
  - (b) Rahul Ltd. is engaged in process engineering industry. During the month of April, 2,000 units were introduced in Process A. The normal loss was estimated at 5 % of input. At the end of the month, 1,400 units had been produced and transferred to Process B, 460 units were incomplete. The entire process had to be scrapped. The incomplete units had reached the following stages of completion:

Materials 75 % completed Labour 50 % completed Overheads 50 % completed

Following are the additional information on Process A:

Cost of 2,000 units
Additional Direct Materials
Direct Labour
Direct Overheads
Units scrapped realized
Rs. 58,000
Rs. 14,400
Rs. 33,400
Rs. 16,700
Rs. 10 each

You are require to prepare the following:

- (i) Statement of Equivalent Production,
- (ii) Statement of Cost per Equivalent Units,
- (iii) Statement of Evaluation;
- (iv) Process A Account, and
- (v) Abnormal Loss/Gain Account.

**Q.4** (a) The Vision Enterprises Ltd. has three production departments, P, Q and R and two service departments S and T. The following figures are extracted from the records of the company:

Particulars	Total Amount (in Rs.)	P	Q	R	S	Т
Direct		2,000	4,000	8,000	4,000	2,000
Materials						
Direct		10,000	4,000	16,000	2,000	4,000
Wages						
Factory	8,000					
Rent						
Power	5,000					
Depreciation	2,000					
Other	18,000					
Overheads	,					
Area	800	200	100	200	100	200
(Sq. ft.)						
Horse	1.50	0.50	0.40	0.20	0.15	0.25
Power						
Machine	18,000	2,000	4,000	8,000	2,000	2,000
Hours						
Capital	20,000	4,000	8,000	4,000	2,000	2,000
Value						

Additional Information: A technical assessment of the apportionment of expenses of service departments is as under:

Particulars	P (%)	Q (%)	R (%)	S (%)	T (%)
Service	45	15	30	-	10
Deptt. S					
Service	60	35	-	05	-
Deptt. T					

You are required to prepare:

- (i) A statement showing the distribution of overheads to various departments,
- (ii) A statement showing redistribution of services departments expenses to production departments, and
- (iii) Machine Hour Rates of the production departments P, Q and R.
- (b) A hotel has a capacity of 100 single rooms and 20 double rooms. The average occupancy of both single and double rooms is expected to be 80 % throughout the year of 365 days. The rent for double room has been fixed at 125 % of the rent of a single room. The costs are as under:

Particulars	Single Rooms	Double Rooms
Fixed Costs	Rs. 120 each per day	Rs. 250 each per day
Variable Costs	Rs. 220 each per day	Rs. 350 each per day

Calculate the rent chargeable for single and double rooms per day in such a way that the hotel earns a margin of safety of 20 % on hire of rooms.

## **Q.4** (a) The following information is given:

Particulars	Amount (in Rs.)
Selling Price per unit	20
Variable Manufacturing Costs per unit	11
Variable Selling Costs per unit	03
Fixed Factory Overheads per year	5,40,000
Fixed Selling Costs per year	2,52,000

You are required to compute:

- (i) Break-even Point expressed in amount of sales in rupees.
- (ii) Number of units that must be sold to earn a profit of Rs. 60,000 per year.
- (iii) How many units must be sold to earn a net profit of 10 % of sales?
- **(b)** The budgeted expenses for production of 10,000 units in a factory are furnished **07** below:

Particulars		Cost Per Unit (in Rs.)
Materials		70
Labour		25
Variable Overheads		20
Fixed Overheads (Rs. 1,00,000)		10
Variable Expenses (Direct)		05
Selling Expenses (10 % Fixed)		13
Distribution Expenses (20 % Fixed)		07
Administration Expenses (Rs. 50,000)	•	05
	Total	155

Prepare a Flexible budget for the production of (a) 8,000 units, and (b) 6,000 units. Assume that administration expenses are rigid for all levels of production.

- Q.5 (a) What is Cost-Volume Profit Analysis? How CVP analysis is useful for the 07 management?
  - (b) Calculate the variances from the following information and give your comments: 07

Particulars	Standard	Actual		
Materials	400 kgs @ Rs. 2 per kg.	420 kgs @ Rs. 2.1 per kg.		
Skilled Labour	80 hours @ Rs. 1.5 per	70 hours @ Rs. 1.5 per		
	hour.	hour.		
Unskilled Labour	600 hours @ Re. 0.90 per	620 hours @ Re. 0.90 per		
	hour.	hour.		

OR

- Q.5 (a) Explain the differences between the costing, cost accountancy and cost 07 accounting.
  - (b) It is estimated that the costs of printing a book will be as follows:

    Identifiable fixed costs: Rs. 2,000. Marginal cost: Re. 1 per book. The printer adds 20 % on break-even price to cover his general fixed costs and profit. What will be the price to be charged per book for:
    - (i) 1,000 books;
    - (ii) 2,000 books; and
    - (iii) 5,000 books?

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