

Test Series: March, 2013

MOCK TEST PAPER – 2

FINAL COURSE: GROUP – II

PAPER – 5: ADVANCED MANAGEMENT ACCOUNTING

Question No. 1 is compulsory

Answer any five questions from the remaining six questions

Time Allowed – 3 Hours

Maximum Marks – 100

1. (a) SFM Ltd. wants to evaluate the potential elimination of Division 'Z'. The basic information regarding cost and revenue is given below:

	Division X and Y	Division Z	Total
Sales	` 1,20,000	` 15,000	` 1,35,000
Variable Expenses	<u>(60,000)</u>	<u>(8,000)</u>	<u>(68,000)</u>
Contribution Margin	60,000	7,000	67,000
Traceable Fixed Costs	<u>(42,000)</u>	<u>(12,000)</u>	<u>(54,000)</u>
Divisional Income	<u>18,000</u>	<u>(5,000)</u>	13,000
Unallocated Fixed Costs			<u>(6,000)</u>
Income before Taxes			<u>7,000</u>

- (i) What will be the increase or decrease in profit by eliminating Division 'Z' if all costs traceable to division 'Z' are avoidable? Should the company eliminate?
- (ii) Assume that executives and supervisory personnel in Division 'Z' will be reassigned to other divisions, if division is eliminated. Included in ` 12,000 of traceable fixed costs of Division 'Z' are ` 6,000 of salaries for these personnel. What is the effect of eliminating division 'Z' with this assumption?
- (iii) Assume that fixed assets of Division 'Z' can be sold for ` 1,50,000 if Division 'Z' is eliminated. Remaining life of these assets is 10 years. Company can earn interest of 12% on invested funds. By what amount will this information affect the benefit to eliminate? [PVIFA (12%, 10) = 5.650] (9 Marks)
- (b) ABC Ltd. has produced the following figures relating to production for the week ended 27th Jan

Production (in units)

Budgeted

Actual

Product A	800	800
Product B	800	600
Product C	200	280

Standard production times were:

	Standard hours per unit
Product A	10
Product B	5
Product C	2

During the week, 11,200 hours were worked on production. You are required to calculate the production volume ratio and efficiency ratio for the week ended 27st Jan.

(6 Marks)

- (c) A small project consists of seven activities for which the relevant data are given below:

Activity	Preceding Activities	Activities Duration (Days)
A	–	4
B	–	7
C	–	6
D	A,B	5
E	A,B	7
F	C,D,E	6
G	C,D,E	5

Draw the network and find the project completion time.

(5 Marks)

2. The following profit reconciliation statement has been prepared by the Cost Accountant of ABC Ltd. for March, 2012:

Budget Profit	3,60,000
Sales Price Variance	76,500 (F)
Sales Volume Profit Variance	<u>63,000</u> (A)
	3,73,500
Material Price Variance	23,820 (A)
Material Usage Variance	4,800 (F)
Labour Rate Variance	1,17,600 (F)
Labour Efficiency Variance	48,000 (A)

Variable Overhead Expenditure Variance	12,000	(F)
Variable Overhead Efficiency Variance	18,000	(A)
Fixed Overhead Volume Variance	2,94,000	(A)
Fixed Overhead Expenditure Variance	<u>6,000</u>	(F)
Actual Profit	<u>1,30,080</u>	

Budgeted production and sales volumes for March, 2012 were equal and the level of finished goods stock was unchanged, but the stock of raw materials decreased by 6,400 kg (valued at standard price) during the month.

The standard cost card is as under:

Material 4 kg @ ` 3.00	12.00
Labour 4 hours @ ` 48.00	192.00
Variable Overhead 4 hours @ ` 18.00	72.00
Fixed Overheads 4 hours @ ` 42.00	<u>168.00</u>
	444.00
Standard Profit	<u>36.00</u>
Standard Selling Price	<u>480.00</u>

You are required to calculate:

- (i) Actual quantity of material purchased
 - (ii) Actual production and sales volume
 - (iii) Actual number of hours worked
 - (iv) Actual variable and fixed overhead cost incurred. (16 Marks)
3. (a) You are required to solve following linear programming problem.
- Maximize $Z = 62,000 x_1 + 1,24,000 x_2$
- Subject to the constraints
- $$3x_1 + 4x_2 \leq 260$$
- $$x_1 \geq 2$$
- $$x_2 \geq 3$$
- $$x_1, x_2 \geq 0$$
- (12 Marks)
- (b) What are some goals of a 'transfer-pricing' system in an organization? (4 Marks)
4. (a) A Company is engaged in manufacturing two products 'KX' and 'KY'. Product 'KX'

uses one unit of component 'KP' and two units of component 'KQ'. Product 'KY' uses two units of component 'KP', one unit of component 'KQ' and two units of component 'KR'. Component 'KR' which is assembled in the factory uses one unit of component 'KQ'.

Component 'KP' and 'KQ' are purchased from the market. The company has prepared the following forecast of sales and inventory for the next year:

	Product 'KX'	Product 'KY'
Sales (in units)	40,000	75,000
At the end of the year	5,000	10,000
At the beginning of the year	15,000	25,000

The production of both the products and the assembling of the component 'KR' will be spread out uniformly throughout the year. The company at present orders its inventory of 'KP' and 'KQ' in quantities equivalent to 3 months production. The company has compiled the following data related to two components:

	'KP'	'KQ'
Price per unit (₹)	40	16
Order placing cost per order (₹)	3,000	3,000
Carrying cost per annum	10%	10%

Required:

- (a) Prepare a Budget of production and requirements of components during next year.
 - (b) Suggest the optimal order quantity of components 'KP' and 'KQ'. (8 Marks)
 - (b) State the relative economics of the "makes vs. buy" decision in management control. (8 Marks)
5. (a) A manufacturer has distribution centres at CX, CY and CZ. These centres have availability 80, 40 and 80 units of his product. His retail outlets at CA, CB, CC, CD, CE requires 50, 20, 40, 60 and 30 units respectively. The transport cost (in rupees) per unit between each centre outlet is given below:

Distribution Centre	Retail Outlets				
	CA	CB	CC	CD	CE
CX	11	6	8	10	10
CY	7	6	20	9	12
CZ	8	12	19	7	6

Determine the optimal distribution to minimize the cost of transportation. (8 Marks)

- (b) A research project, to date, has cost a company ` 1,25,000 and is under review. It is anticipated that, should the project be allowed to proceed, it will be completed in about one year and can be sold for ` 2,00,000. The following additional information is available:

- (i) Materials have just been received for ` 30,000. These are extremely toxic, and if not used in the project, have to be disposed of by special means at ` 7,500.
- (ii) Labour: ` 37,500. The men are highly skilled. If they are released from the Research Project, they may be transferred to the Works Department of the company and consequently the sales could increase by ` 75,000. The accountant estimates that the prime cost of those sales would be ` 50,000 and the overhead absorbed (all fixed) would amount to ` 12,500.
- (iii) Share of General Building Expenses: ` 17,500. The Managing Director is not sure what is included in this amount, but the accounts staff charge similar amounts each year to each department.

You are required to advise whether the project should be allowed to proceed and explain the reasons for the treatment of each of the amounts above in your analysis.

(8 Marks)

6. (a) SB Ltd., manufactures a range of products which it sells through manufacture's agents to whom it pays commission of 25% of the selling price of the products. Its budgeted profits and loss statement for 2012 is as follows:

Sales		30,00,000
Less: Production Costs:		
Prime Cost and Variable Overhead	10,50,000	
Fixed Overhead	<u>4,22,000</u>	14,72,000
Less: Selling Costs:		
Commission to Manufacture's Agents	7,50,000	
Fixed Sales Office Expenses	<u>50,000</u>	8,00,000
Less: Fixed Administration Cost		<u>4,80,000</u>
Profit		<u>2,48,000</u>

Subsequent to the preparation of the above budgeted profit and loss statement, the company is faced with a demand from its agents for an increase in their commission to 30% of selling price. As a result, the company is considering whether it might

achieve more favorable results if it were to discontinue the use of manufacturer's agents and, instead employ its own sales force. The costs that could involve are budgeted as follows:

	(`)
Sales manager (salary and expenses)	85,000
Salesmen's expenses	25,000
Sales office costs(additional to present costs)	60,000
Interest and depreciation on sales department cars	42,000

In addition to the above, it will be necessary to hire four salesmen at a salary of ` 60,000 per annum each plus commission of 5% on sales plus car allowance of ` 6 per kilometer to cover all costs except interest and depreciation.

On the assumption that the company decides to employ its own sales force on the above terms you are required to ascertain:

- (i) What is the maximum average kilometer per annum that salesmen could travel if the company is to achieve the same budgeted profit as it would be obtained by retaining the manufacturer's agents and granting them the increased commission they had requested? Assume that sales in each case would be as budgeted.
 - (ii) At what level of sales would the original budgeted profit be achieved if each salesman was to travel an average of 16,000 kilometers per annum? Assume that all other assumptions inherent in the budgets were maintained.
 - (iii) What is the maximum level of commission on sales that the company could afford to pay if it wished to achieve a 20% increase in its original budgeted profit and expected a 15% increase in sales (at budgeted selling price) and average of 14,000 kilometers per annum to be travelled by each salesman. (12 Marks)
- (b) What is differentiation advantage? (4Marks)
7. Answer any four of the following questions:
- (a) Explain the concept and aim of theory of constraints. (4 Marks)
 - (b) What is the fundamental difference between Activity Based Costing System (ABC) and Traditional Costing System? (4 Marks)
 - (c) In an assignment problem to assign jobs to men to minimize the time taken, suppose that one man does not know how to do a particular job, how will you eliminate this allocation from the solution? (4 Marks)
 - (d) What is Pareto Analysis? Name some applications. (4 Marks)

- (e) Discuss the benefits accruing from the implementation of a Total Quality Management programme in an organization. (4 Marks)