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P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belgaum)

Third Semester - Master of Business Administration (MBA)

Semester End Examination; Dec. - 2015

Management Accounting and Control System

Time: 3 hrs

Max. Marks: 100

Note: Answer any **FOUR** full questions from **PART - A** and **PART - B** (Case Study) is compulsory.

PART - A

- 1 a. Explain the concept of cost center - profit centre, profit center and Investment center. 10
- b. Explain different types of costs classified under various basis. 10

OR

- 2 a. Vardhman Ltd manufactures one product. A summary of its activities for the year 2012 is given below :

	Unit	`
Sales	80,000	8,00,000
Material Inventory(1-1-12)		40,000
Material inventory (31-12-12)		32,000
WIP(1-1-12)		55,000
WIP(31-12-12)		72,000
Finished Goods (1-1-12)	16,000	64,000
Finished goods (31-12-12)	34,000	1,51,265
Material Purchases		1,52,000
Direct labour		1,45,000
Manufacturing overhead		1,08,000
Selling expenses		50,000
General expenses		40,000

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Prepare Cost sheet.

- b. The particulars obtained from the records of M/s Prateek Industries for the year 2014 are given below, from which you are required to prepare a cost sheet and a statement showing estimated cost of 1000 units in future :

Opening stock	`
Raw materials	1,40,000
Finished Products	20,000
Purchases	2,10,000
Factory wages	3,80,000
Factory overheads	70,000
Office overheads	40,000
Closing stock:	
Raw materials	19,600
Finished goods	1,60,000
Sales	7,56,000

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At the end of the year, the number of units produced including the closing stock and the number of units sold was 4,000.

On the basis of the above, industry wanted to supply 1000 units in future. It is estimated that the prices of raw materials and labour may rise by 15% and 10% respectively. Assume the same percentage of profit on sales will be made.

- 3 a. What is an overhead? Explain the classification of overhead costs. 10
- b. What is Activity Based Costing? Explain the steps involved in activity based costing. 10

OR

- 4 a. A company has three production departments and two service departments. Distribution summary of overheads is as follows :

Production Departments:		`	
A	13,600		
B	14,700		
C	12,800		
Service Departments:			10
X	9,000		
Y	3,000		

The expenses of service departments are charged on a percentage basis which is as follows :

	A	B	C	X	Y
X Dept.	40%	30%	20%	-	10%
Y Dept.	30%	30%	20%	20%	-

Apportion the cost of service departments by using the repeated distribution method.

- b. A product has to pass through three processes A, B and C. The normal wastage of each process is as follows: process A - 3%, B - 5% and C - 8%. Wastage of process A was sold at 25 paise per unit that of process B at 50 paise per unit and that of process C at ` 1 per unit.

10,000 units were issued to Process A in the beginning of October 2010 at a cost of ` 1 per unit. The other expenses are as follows :

	Process A	Process B	Process C	10
Sundry Materials	` 1000	` 1500	` 500	
Labour	5000	8000	6500	
Direct expenses	1050	1188	2009	
Actual output	9,500 units	9,100 units	8,100 units	

Prepare the process Accounts, assuming that there were no opening/closing stocks. Also give the abnormal wastage and abnormal gain accounts.

- 5 a. What do you mean by marginal costing? Explain the difference between marginal costing and absorption costing. Also give the limitation of marginal costing. 10
- b. What is Break Even Analysis? With the help of break even chart explain the concept angle of incidence, land margin of safety. List out the basic assumptions in Break Even Analysis. 10

OR

6 a. From the following data calculate BEP expressed in amount of sales in `

i) No. of units must be sold to earn a profit of ` 60,000 per year.

ii) How many units are to be sold to earn a net income of 10% of sales?

iii) Sales Price – 20 per unit, variable manufacturing cost – 11 per unit, Variable selling cost – 3 per unit, fixed factory OH – 5,40,000, Fixed selling cost – 2,52,000.

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b. In a purely competitive market, 10000 units of a product can be manufactured and sold. Certain amount of profit is generated. It is estimated that 2000 units of that product need to be manufactured and sold in a monopoly market to earn the same profit.

Profit under both the market condition is targeted at ` 2,00,000. The variable cost per unit is 100. Total fixed cost is ` 37,000, You are required to determine selling prices under different condition.

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7 a. A manufacturing company produces 20,000 units by operating at 60% of the capacity and sells at a price of ` 30 per unit. The budgeted figures are as follows :

Particulars	Production (20,000 units)
Raw material @ ` 4.25	85,000
Direct labour @ ` 5.75	1,15,000
Variable factory overhead @ ` 7.75	1,55,000
Fixed factory over head	1,25,000
Variable selling costs 2.75% of selling price	
Fixed selling and administrative costs	72,500

The company receives a special order for 10,000 units from a firm, The company desires to earn a profit of ` 1.00 per unit and no selling expenses are to be incurred for the special order.

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The minimum price on the special order and income statements are as follows :

Variable costs to be incurred: (10,000 units)	
Raw materials	4.25
Direct labour	5.75
Variable overhead	<u>7.75</u>
Variable cost per unit (no selling expenses)	17.75
Desired profit	<u>1.00</u>
Minimum price	<u>18.75</u>

Should the company accept the special order?

b. The cost per unit of the products A, B and C of Thomas Ltd is as follows :

Particulars	A	B	C
Direct material	10	8	9
Direct labour	6	7	6
Variable expenses	4	5	3

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Fixed expenses	3	3	2
Total Cost	23	23	20
Profit	9	7	6
Selling Price	32	30	26
No. of units produced	10,000	5,000	8,000

Contd... 4

Production arrangements are such that one product is given up, the production of other can be raised by 50%. The directors proposed that Product 'C' should be given up because continuation is that case is lowest. Do you agree? What is your suggestion? Analyze.

- i) Product 'A' is given up and B, C are produced
- ii) product 'B' is given up and A, C are produced
- iii) Product 'C' is given up and A, B are produced

OR

- 8 a. What is cost audit? Explain the scope of cost audit. 10
- b. What is cost control and cost reduction? Give differences between cost control and cost reduction. 10

PART - B

9. **Case Study:** Answer all the questions related to the case asked below :

The following are data available for a manufacturing company :

Particulars	Amount (in lakhs)
Wages and Salaries	9.5
Rent, rates and taxes	6.6
Depreciation	7.4
Sundry Administrative expenses	6.5
Semi-variable expenses (50% capacity)	
Maintenance and Repairs	3.5
Indirect labour	7.9
Sales Dept. Salary	3.8
Sundry administrative expenses	2.8
Variable expenses (50% capacity)	
Material	21.7
Labour	20.4
Other expenses	7.9
Total cost	98

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Assume that fixed expenses remain constant at all levels of production, semi-variable expenses remains constant between 45% and 65%, capacity increasing by 10% between 65% and 80%, capacity is increasing by 20% between 80% to 100% capacity.

Sales at various levels :

- i) 50% capacity – 100 lakhs
- ii) 60% capacity – 120lakhs
- iii) 75% capacity – 150 lakhs
- iv) 90% capacity – 180 lakhs

v) 100% capacity – 200 lakh

Prepare a flexible budget for the year and estimated profit at all these levels.

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