USN
-----



## **14MBAFM305**

# Third Semester MBA Degree Examination, Dec.2015/Jan.2016 Cost Management

Time: 3 hrs.

Max. Marks: 100

#### **SECTION - A**

Note: Answer any FOUR questions from Q.No.1 to Q.No.7.

- 1 What is cost centre? (03 Marks)
- What do you understand by the term "Break Even Analysis"? (03 Marks)
- 3 What is overhead? (03 Marks)
- 4 What is a flexible budget? (03 Marks)
- 5 What is activity based costing system? (03 Marks)
- 6 Mention the scope of cost audit. (03 Marks)
- 7 Define cost reduction and cost control. (03 Marks)

#### **SECTION - B**

Note: Answer any FOUR questions from Q.No.1 to Q.No.7.

- 1 Explain in brief different methods of costing. (07 Marks)
- 2 Distinguish between allocation and apportionment of overheads. (07 Marks)
- 3 What is meant by CVP analysis? Briefly explain the assumptions and uses of CVP analysis.

4 Mention 3 differences between budgeted cost and standard cost. (07 Marks)
(07 Marks)

- 5 Cost volume and profit relationship of a company is described by an equation y = 3,00,000 + 0.7x, in which 'x' represents the sales revenue and 'y' represents the total cost. Find out the following:
  - i) C/S ratio ii) BEP iii) Sales volume required to earn a profit of ₹ 90,000/-
  - iv) Sales volume when there is a loss of ₹30,000. (07 Marks)
- 6 The following standards have been set to manufacture product:

Direct labour 3 hrs @ ₹ 8/hr 24
Total standard prime cost 56

The company manufactured and sold 6000 units of the products during the year. Direct material cost were as follows:

12,500 units of A @ ₹ 4.4/unit

18,000 units of B @ ₹ 2.8/unit

88,500 units of C @ ₹ 1.2/unit

The company worked 17,000 direct labour hours during the year for 2,500 hrs, company paid @ ₹ 12/hr, while the remaining wages were paid at standard rate. Calculate material price variance and usage variance, labour rate and efficiency variance. (07 Marks)

ABC ltd has prepared the following sales budget for the first five months of 2010.

	,	THE THE THE THE
M	lonth	Sales budget in units
	Jan	10,800
]	Feb	15,600
1	Mar	12,200
A	April	10,400
N	May	9,800



The inventory of finished goods at the end of every month is to be equal to 25% of the sales estimate for the next month. On 1<sup>st</sup> Jan there were 2700 units of the product on hand. There is no work in progress at the end of any month, every unit of the product may require 2 types of material in the following qualities:

Material 'A' -4 units Material 'B' -5 units

Materials equal to one-half on the next month productions is to be on hand of every month. This requirement was met on 1<sup>st</sup> Jan. Prepare a material budget for the 1<sup>st</sup> quarter of 2010 in a logical form showing the quantities of each type of material to be purchased. (07 Marks)

## **SECTION - C**

# Note: Answer any FOUR questions from Q.No.1 to Q.No.7.

A company has 3 production departments A, B and C and 2 service departments X and Y. The following data are extracted from the records of the company for a particular given period:

Rent and Rates = ₹ 25,000; Power = 7,500; General lighting = ₹ 3,000; Depreciation on machinery = ₹ 50,000; Indirect wages = ₹ 7,500; Sundries = ₹ 50,000

Particulars	Total (₹)	Departments				
		A	В	С	X	Y
Direct wages	50,000	15,000	10,000	15,000	7,500	2,500
HP of machine used	150	60	30	50	10	-
Cost of machinery	1,25,000	3,00,000	4,00,000	5,00,000	25,000	25,000
Production hour worked	70,	6226	4028	4066	-	-
Floor space (sq. mts)	10,000	2,000	2,500	3,000	2,000	500
Lighting point	60	10	15	20	10	5

Service department expenses

Department	A	В	C	X	Y
X	20%	30%	40%	-	10%
Y	40%	20%	30%	10%	_

You are required to,

- i) Compute the overhead rate of production department using repeated distribution method.
- ii) Hence, determine the total cost of a product whose direct materials cost and direct labour cost are respectively ₹ 250 and ₹ 150 and which would consume 4 hrs, 5 hrs and 3 hrs in department A, B and C respectively. (10 Marks)
- An enterprise has a maximum production capacity of 2,00,000 until per year. Normal capacity utilization is recognized as 90% standard variable production cost are ₹11/unit. The fixed cost are ₹3,60,000/year. Variable selling cost are ₹3/unit and fixed selling costs are ₹2,70,000 per year. The unit selling price is ₹20.

In the year ended on 31<sup>st</sup> March 2010, the production was 1,60,000 units and sales were 1,50,000 units. The closing inventory on 31<sup>st</sup> March 2010 was 20,000 units. The actual variable production cost for the year were ₹ 35,000 higher than the standard.

- i) Calculate the profit for the year by absorption costing and variable costing methods.
- ii) Explain the difference in profits.

(10 Marks)



(10 Marks)



3 Image furnishing ltd., manufactures a various variety of premium board room chairs. Its job system is designed using ABC approach. There are 2 direct cost categories consists of direct material and their indirect cost pool representing three activities areas at the plant.

Manufacturing	Budgeted cost	Cost drivers used	Cost allocation
Activity area		as allocation base	rate
Material handling	2,00,000	Parts	0.25
Cutting	2,00,000	Parts	2.50
Assembly	2,00,000	Direct manufacturing	25.00
		labour hrs	1 13

Two styles of chairs were produced in March, executive and chairman chairs. Their quantity, direct material cost and other data for March are as follows:

Types of	Units	Direct material	No. of	Direct manufacturing
chairs	produced	cost	parts	labour hrs.
Executive	5000	6,00,000	1,00,000	7500
Chairman	100	25,000	3,500	500

The direct manufacturing labour rate is ₹ 20 per hrs. Assuming no beginning / ending inventory. Compute the total manufacturing costs and units cost of the 2 types of chairs.

4 The following data are available for a manufacturing company for a yearly period:

Fixed expense	(in lakhs)	Semi variable expense	(lakhs)
		(@ 50% cap)	
Wage & Salary	9.5	Maintenance & repairs	3.5
Rent, rate & tax	6.6	Indirect labour	7.9
Depreciation	7.4	Sales dept salary	3.8
Sundry administration expense	6.5	Sundry adm exp	2.8

Variable expense (@ 50% cap)	(lakhs)
Materials	21.7
Labour	20.4
Other expenses	7.9
Total cost	98.0

Assume that the 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 and by 20% between 80% and 100% capacity sales @ various level are (lakhs)

	50% capacity	100
	60% capacity	120
	75% capacity	150
8	90% capacity	180
	100% capacity	200

Prepare a flexible budget for the year and estimate the profit at these levels of budget.

(10 Marks)

- 5 What is activity based costing? Explain the steps involved in brief. (10 Marks)
- 6 What is difference between cost audit and financial audit? (10 Marks)
- 7 Distinguish between cost reduction and cost control. (10 Marks)



# **SECTION - D** CASE STUDY - [ Compulsory

Pramod Ltd, manufactures two types of pens, deluxe and popular following expenses were incurred during the month ended July 2010.

Direct labour	4,48,000
Direct material	8,00,000
Manufacture expenses	1,92,000

- i) It is ascertained that direct material cost per unit in deluxe type is twice as that of popular
- ii) Direct labour per unit in popular is 60% of that in deluxe type.
- iii) Manufacturing overheads is shared in totals in ratio of 1:3
- iv) Administrative overheads is observed @ 100% of direct labour.
- v) Marketing expenses ₹ 1/pen
- vi) Production: Deluxe  $\rightarrow$  40,000 pens but 36,000 sold. Popular  $\rightarrow$  1,20,000 pens but 1,00,000
- Highly confidential document ELLC , 184. vii) Selling price ₹ 28/- per deluxe pen and ₹ 20/- per popular pen.

(20 Marks)