

CBCS SCHEME

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16/17MBAFM305

Third Semester MBA Degree Examination, Dec.2018/Jan.2019 Cost Management

Time: 3 hrs.

Max. Marks:80

**Note: 1. Answer any FOUR full questions from Q.No.1 to Q.No.7.
2. Question No. 8 is compulsory.**

- 1 a. What do you mean by standard costing? (02 Marks)
 b. What is Marginal costing? What are its applications? (06 Marks)
 c. Vijay Industries manufactures a product 'X'. On 1st January 2017, there were 5000 units of finished product in stock. Other stocks on 1st January 2017 were as follows:

Particulars	Rs.
Work-in-progress	57400
Raw materials	116200

The information available from cost records for the year ended 31st December 2017 was as follows:

Particulars	Rs.
Direct materials	9,06,900
Direct labour	3,26,400
Freight on raw material purchased	55,700
Indirect labour	1,21,600
Other factory overheads	3,17,300
Stock of raw materials on 31/12/2017	96,400
Work-in-progress on 31/12/2017	78,200
Sales (1,50,000 units)	30,00,000
Indirect materials	2,13,900

There are 15000 units of finished stock in hand on 31/12/17. You are required to prepare: A statement of cost of profit assuming that opening stock of finished goods is to be valued at the same cost per unit as the finished stock at the end of the period. (08 Marks)

- 2 a. Define management audit. (02 Marks)
 b. Distinguish between fixed budget and flexible budget. (06 Marks)
 c. The costs per unit of three products X, Y and Z are given below:

Products	X	Y	Z
Direct Material (Rs.)	20	16	18
Direct Labour (Rs.)	12	14	12
Variable Overheads (Rs.)	08	10	06
Fixed Expenses (Rs.)	06	06	04
Rs.	46	46	40
Profit	18	14	12
Selling Price (Rs.)	64	60	52
Number of units produced	10000	5000	8000

Production arrangements are such that if one product is given up the production of the others can be raised by 50%. The directors propose that product 'Z' should be given up because the contribution from the product is the lowest. Present suitable analysis of the data indicating whether the proposal should be accepted. (08 Marks)

- 3 a. Define Master Budget. (02 Marks)
- b. From the following, compute: (i) Materials cost variance (ii) Materials price variance (iii) Materials usage variance.
 Quantity of material purchased = 3000 units
 Value of material purchased = Rs.9000
 Standard quantity of materials required per tonne of output = 30 units
 Standard rate of material = Rs.2.50 per unit
 Opening stock of materials = NIL
 Closing stock of materials = 500 units
 Output during the period = 80 tonnes (06 Marks)
- c. Discuss the classification of overheads according to elements and functions. (08 Marks)

- 4 a. What is cost driver? (02 Marks)
- b. Image furnishing Ltd, manufactures a various variety 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 Activity Area	Budgeted Cost	Cost Drivers used as allocation base	Cost allocation Rate
Material handling	2,00,000	Parts	0.25
Cutting	2,00,000	Parts	2.50
Assembly	2,00,000	Direct Manufacturing Labour hrs	25.00

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 Chairs	Units Produced	Direct Material Cost	No. of parts	Direct Manufacturing Labour hrs.
Executive	5,000	6,00,000	1,00,000	7,500
Chairman	100	25,000	3,500	500

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

(06 Marks)

- c. Hind General corporation produces only one product which had the following costs:
 Variable manufacturing costs = Rs.4 per unit
 Fixed manufacturing costs = Rs.2,00,000 per year
 The normal capacity is set at 2,00,000 units. There are no work-in-progress inventories. In 2001, the company produced 2,00,000 units and sold 90 percent of them at a price of Rs.7 per unit. In 2002, the company produced 2,10,000 units and sold 2,15,000 units at the same price. You are required to prepare Income Statements for 2001 and 2002 based on Absorption Costing and Marginal Costing. (08 Marks)

- 5 a. What is segment reporting? (02 Marks)
- b. What is BEP? What are its assumptions? (06 Marks)
- c. Gama Engineering company Ltd manufactures two products X and Y. an estimate of the number of units expected to be sold in the first seven months of 2017 is given below:

	Product X	Product Y
January 2017	500	1400
February	600	1400
March	800	1200
April	1000	1000
May	1200	800
June	1200	800
July	1000	900

It is anticipated that:

- i) There will be no work-in-progress at the end of any month, and
- ii) Finished units equal to half and anticipated sales for the next month will be in stock at the end of each month (including December 2016).

The budgeted production and production costs for the year ending 31st Dec 2017 are as follows:

Particulars	Product X	Product Y
Production (units)	11,000	12,000
Direct Materials per unit (Rs.)	12	19
Direct wages per unit (Rs.)	05	07
Direct manufacturing charges apportionable to each type of product (Rs.)	33,000	48,000

You are required to prepare:

- i) A production budget showing the number of units to be manufactured each month.
- ii) A summarized production cost budget for the six month period January to June 2017.

(08 Marks)

- 6 a. 'X' Ltd has earned contribution of Rs.2,00,000 and net profit of Rs.1,50,000 on sales Rs.8,00,000. What is its margin of safety? (02 Marks)
- b. Explain the steps in Activity Based Costing. (06 Marks)
- c. Distinguish between cost control and cost reduction. (08 Marks)
- 7 a. What is Target Costing? (02 Marks)
- b. Madhan Manufacturing Ltd has 3 departments, which is regarded as production and service department. Service department cost are distributed to production department using step ladder method of distribution.

Estimated factory overheads cost to be incurred by each departments in coming years are as follows; data required for distribution is also shown against each department:

Department	Factory Overheads (Rs.)	Direct Labour Hrs	No. of Employees	Area (sq-foot)
Production dept. X	1,93,000	4000	100	3000
Production dept. Y	64,000	3000	125	1500
Production dept 'Z'	83,000	4000	85	1500
Service dept 'P'	45,000	1000	10	500
Service dept 'Q'	75,000	5000	50	1500
Service dept 'R'	1,05,000	6000	40	1000
Service dept 'S'	30,000	3000	50	1000

The overheads cost of 4 service department are distributed in the same order in the following basis:

Dept	Basis
'P'	No. of employees
'Q'	Direct labour
'R'	Area in sq. feet
'S'	Direct labour hour

You are required to prepare a schedule showing the distribution of overhead cost of 4 service department to 3 production departments. (06 Marks)

- c. 'A' Ltd maintains a Margin of Safety (MOS) of 37.5% with an overall contribution to sales ratio of 40%. Its fixed costs amount to Rs.5 lakhs. Calculate the following:
 - i) Break-even sales
 - ii) Total sales
 - iii) Total variable costs
 - iv) Current profit
 - v) New MOS if the sales volume is increased by 7.5%. (08 Marks)

8 **CASE STUDY: (Compulsory)**

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

Particulars	Rs.
Rent and Rates	25,000
General lightings	3,000
Indirect wages	7,500
Power	7,500
Depreciation on machinery	50,000
Sundries	50,000

Additional data, department wise:

Particulars	Departments					
	Total	A	B	C	X	Y
Direct wages (Rs.)	50,000	15,000	10,000	15,000	7,500	2,500
Horse power of machines	150	60	30	50	10	-
Cost of machinery	12,50,000	3,00,000	4,00,000	5,00,000	25,000	25,000
Production Hrs.	-	6226	4028	4066	-	-
Floor space (sq. mtr)	10,000	2000	2500	3000	2000	500
Lighting points (nos)	60	10	15	20	10	05

Service Departments' Expenses Allocation:

Departments	A	B	C	X	Y
X	20%	30%	40%	-	10%
Y	40%	20%	30%	10%	-

You are required to:

- Compute the overhead rate of production departments using the repeated distribution method
- Hence, determine the total cost of a product whose direct material cost and direct labour cost are respectively Rs.250 and Rs.150 and which would consume 4 hours, 5 hours and 3 hours in departments A, B and C respectively. (16 Marks)

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