STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086. (For candidates admitted during the academic year 2004-2005 \& thereafter)

SUBJECT CODE : CM/PS/AM45

## M.Com. DEGREE EXAMINATION APRIL 2009 <br> COMMERCE <br> FOURTH SEMESTER

## COURSE : SPECIALISATION

 PAPER : ACCOUNTING FOR MANAGERIAL DECISIONSTIME : $\mathbf{3}$ HOURS MAX. MARKS : $\mathbf{1 0 0}$

## SECTION - A

## ANSWER ANY FIVE QUESTIONS:

1. A Company produces only one product which had the following costs:

Variable manufacturing costs Rs. 4 per unit
Fixed manufacturing costs Rs.1,00,000 per annum
The normal capacity is set at $1,00,000$ units
There are no work in process inventories. Fixed overhead rate is Re. 1 per unit. In 2004 the company produced $1,00,000$ units and sold 90,000 units at a price of Rs. 8 per unit. In 2005 the company produced $1,10,000$ units and sold $1,15,000$ units at the same price. You are required to prepare income statements for 2004 and 2005 based on absorption costing and variable costing.
2. Present the following information clearly to management
a) The marginal product cost and the contribution per unit
b) The total contribution and profits resulting from each of the following mixtures

Particulars Product Price Per unit
(Rs.)

| Direct Material | A | 10 |
| :--- | :---: | :---: |
| Direct Material | B | 9 |
| Direct Wages | A | 3 |
| Direct Wages | B | 2 |

Fixed Expenses.......Rs. 800
Variable expenses are allotted to the products as $100 \%$ of direct wages

Particulars Product Price Per unit
(Rs.)
20
Sale price
A 15

Sales Mixture:
a) 100 units of Product A and 200 of B
b) 150 units of Product $A$ and 150 of $B$
c) 200 units of Product A and 100 of $B$
3. From the following information compute
i) Fixed Overheads Variance
ii) Expenditure Variance
iii) Capacity Variance
iv) Efficiency Variance

| Particulars | Budget | Actual |
| :--- | :---: | :---: |
| Fixed Overheads for Nov | Rs.20,000 | Rs.20,400 |
| Units of Production in Nov | 10,000 | 10,400 |
| Standard Time for 1 Unit | 2 Hours |  |
| Actual Hours Worked |  | 20,100 hours |

4. The following information relates to a flexible budget at $60 \%$ activity, Prepare a budget for production at $80 \%$ and $100 \%$ activity
Production at $60 \%$ activity 600 units
Materials Rs. 100 per unit
Labour Rs. 40 per unit
Direct Expenses
Rs. 10 per unit
Factory Overheads
Rs.40,000 (40\% fixed)
Administration Expenses
Rs.30,000 (60\% fixed)
5. M Ltd produces two products A and B using the same equipment and similar processes. An extract of the production data for these products in one period is shown as follows:

## Particulars <br> A B

Quantity produced (units)
Direct Labour hour per unit Machine Labour hours per unit
Set-ups in the period
6,000 $\quad 8,000$

Orders handled in the period
24
4 2
$20 \quad 60$

Over Head Costs:

## Rs.

Related to machine activity
3,20,000
Related to production run set-ups
30,000
Related to handling of orders

$$
\begin{array}{r}
46,000 \\
\hline 3,96,000 \\
\hline
\end{array}
$$

Required:
Calculation of production overheads to be absorbed by one unit of each product using the following costing methods:
a) Traditional costing approach using a direct labour hour rate to absorb overheads
b) An activity based costing approach, using suitable cost drivers to trace overheads to products.
6. Explain the importance of marginal costing in decision making.
7. Write short notes on:
a) Key Factor
b) Zero based budgeting
c) Methods of pricing.
8. The Sales Manager of a company engaged in the manufacture and sale of three products $\mathrm{P}, \mathrm{Q}$ and R gives you the following information for the month of October 2008:
Budgeted Sales: -

| Product | Units sold | Selling price per unit | Standard contribution Margin <br> per unit <br> Rs. |
| :---: | :---: | :---: | :---: |
| P | Rs. | 6 |  |
| Q | 2,000 | 12 | 4 |
| R | 2,000 | 8 | 1 |

## Actual Sales:

P 1,500 units for Rs.15,000
Q 2,500 units for Rs.17,500
R 3,500 units for Rs.21,000
(a) You are required to calculate the following variances:
i) The sales price variance.
ii) The sales volume variance.
iii) The sales quantity variance.
iv) Sales mix variance.

## SECTION - B

ANSWER ANY THREE QUESTIONS: $\quad(3 \times 20=60)$
9. A family store wants information about the profitability of individual product lines. Soft drinks, fresh produce and packaged products. The following information is provided for the year 2002-03 for each product line:

|  | Soft drinks | Fresh produce | Packaged food |
| :--- | ---: | ---: | ---: |
|  | Rs. | Rs. | Rs. |
| Revenue | $7,93,500$ | $21,00,600$ | $12,09,900$ |
| Cost of goods sold | $6,00,000$ | $15,00,000$ | $9,00,000$ |
| Cost of bottles returned | 12,000 | 0 | 0 |
| Number of purchase order placed | 360 | 840 | 360 |
| Number of deliveries received | 300 | 2,190 | 660 |
| Hours of shelf-stocking time | 540 | 5,400 | 2,700 |
| Items sold | $1,26,000$ | $11,04,000$ | $3,06,000$ |

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Family stores also provide the following information for the year:
Total cost (Rs.)
Bottles returns $\quad 12,000$
Ordering $\quad 1,56,000$
Delivery $\quad 2,52,000$
Shelf-stocking $\quad 1,72,800$
customer support $\quad 3,07,200$
If family stores allocates support cost (all costs other than cost of goods hold) to product lines using activity based costing, calculate the operating income and operating income as a percentage of revenues for each product line.
10. From the following particulars, find the most profitable product, all the three products are produced from the same material, same type of machines and labour, when
a) Raw material is in short supply
b) Production Capacity is the limiting factor
c) When labour is the limiting factor, and the available labour is limited to 18,600 hours, ascertain the profitable product mix.
d) Machine hours is the key factor
e) Sales revenue is the limiting factor

|  | A | B | C |
| :--- | :---: | :---: | :---: |
| Selling price per unit Rs. | 60 | 55 | 50 |
| Direct materials (kg.) | 5 | 3 | 4 |
| Direct labour (Hrs.) | 4 | 3 | 2 |
| Fixed overheads (Rs.) | 7 | 13 | 8 |
| Cost of direct materials per kg. (Rs.) | 4 | 4 | 4 |
| Direct labour rate Rs. | 2 | 2 | 2 |
| Maximum possible unit of sales | 4,000 | 5,000 | 1,500 |

11. Compute material variances from the following information:

|  | Standard |  | Actual |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qty. | Rate | Qty. | Rate |
| A | 40 | 4 | 830 | 4.25 |
| B | 60 | 3 | 1190 | 2.75 |

Standard loss is $15 \%$. The actual output is 1700 units.
12. From the following cost data, forecast the cash position at the end of April, May and June 2004 :

| Month | Sales | Purchases | Wages | Miscellaneous |
| :--- | :--- | :--- | :--- | :--- |
| Feb. | $1,20,000$ | 84,000 | 10,000 | 7,000 |
| March | $1,30,000$ | $1,00,000$ | 12,000 | 8,000 |
| April | 80,000 | $1,04,000$ | 8,000 | 6,000 |
| May | $1,16,000$ | $1,06,000$ | 10,000 | 12,000 |
| June | 88,000 | 80,000 | 8,000 | 6,000 |

Additional information:
a) $20 \%$ Sales realized in the month of sales, discount allowed $2 \%$ balance realized equally in two subsequent months.
b) Purchases are paid in the month following the month of supply.
c）Wages $-25 \%$ paid in arrears in the following month．
d）Miscellaneous expenses paid a month in arrears．
Rent Rs． 1,000 per month paid．Income tax－first installment of advance tax Rs． 25,000 due on June．
e）Income from investments－Rs．5，000 received quarterly in April，July etc．
f）Cash in hand－Rs．5，000 on $1^{\text {st }}$ April， 2004.
13．A glass manufacturing company required you to calculate and present the budget showing the profit for the next year from the following information：

Sales：
Toughened glass
Rs．3，00，000
Bent toughened glass
Rs．5，00，000
Direct material cost
$60 \%$ of sales
Direct wages
20 workers＠Rs． 150 per month
Factory overheads：
Indirect labour：
Works manager Rs． 500 per month
Foreman Rs． 400 per month
Stores and spares
Depreciation on machinery
$21 / 2 \%$ on sales
Light and power
Repairs and maintenance
Rs．12，600

Other sundries
Rs．8，000
Administration，selling and distribution expenses Rs．14，000 per year

