

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.  
(For candidates admitted during the academic year 2008-2009)

SUBJECT CODE: CM/MC/AM34

**B.Com. DEGREE EXAMINATION NOVEMBER 2009**  
COMMERCE  
THIRD SEMESTER

COURSE : MAJOR – CORE  
PAPER : ADVANCED COST AND MANAGEMENT ACCOUNTING  
TIME : 3 HOURS MAX. MARKS: 100

**SECTION – A**

**ANSWER ALL QUESTIONS: ( 10 x 3 = 30 )**

**Explain the following**

1. Abnormal gain and Abnormal loss
2. Limiting factor
3. Overhead expenditure variance
4. Break even sales and Margin of Safety
5. Work in Progress in Contract Costing
6. Budgeted sales 10000 units at Rs.3 per unit  
Actual sales 5000 units at Rs.3 per unit and 8000 units at Rs.2.50 per unit  
Calculate Sale price and Volume variance
7. An automobile company finds that the cost of making a component is Rs.6, whereas the same item is available in the market at Rs.5.60. The cost data to manufacture the part, comprises of:  
Material Rs.2; Direct Labour Rs.2.50; variable overheads Rs.0.50 and fixed overheads (allocated) Re.1.  
a) Should the part be made or bought?  
b) What would your answer be, if the market price is Rs.4.60?  
Show your calculations clearly.
8. Sales Rs.25,00,000; PV ratio 40%; Fixed cost Rs.5,00,000.  
Calculate Profit and Margin of Safety.
9. A transport concern runs a 5 ton truck between two towns 100 kms apart. It makes one round trip a day and operates for 30 days in a month. On the upward journey it carries full capacity, but on the return journey only 20% of capacity is carried. If the expenses for the month are Rs.1,80,000 calculate the operating cost per ton kilometer.
10. X Ltd budgets a sale of 1,10,000 units in January and 1,40,000 units in February 2010. It plans to have a closing stock of finished goods at the end of each month, equal to 20% of the budgeted sales of the next month (including December 2009). How many units should be produced in January 2010?

**SECTION – B**

ANSWER ANY FIVE QUESTIONS:

( 5 x 8 = 40 )

11. A transport company is running 2 buses between two towns which are 100 kms apart. The seating capacity of each bus is 40 passengers. The following particulars were obtained from their books for April 2008:

Wages of driver, conductors etc.	Rs.2,400
Office salaries	Rs.1,000
Diesel	Rs.4,000
Repairs	Rs. 800
Road tax and insurance	Rs.1,600
Depreciation	Rs.2,600
Garage rent	Rs.2,000

Actual passengers carried 80% of the seating capacity

Both buses ran on all the days of the month. Each bus made one round trip per day. The driver and the conductor have to be paid 10% of takings as commission. If the company wants a profit of 15% on takings, calculate the fare to be charged per passenger km.

12. A contractor obtained a contract for Rs.6,00,000 on 1<sup>st</sup> April 2008. The expenses incurred during the year ended 31<sup>st</sup> March 2009 were as under:

	Rs.
Materials issued	1,80,000
Wages paid	1,60,000
Wages accrued	9,000
Other expenses	25,000

Plant costing Rs.45,000, specially installed for the contract, was returned to the store, subject to a depreciation of 20%. Out of the materials issued, material costing Rs.10,000 were transferred to another contract. Materials at site on 31.03.2009 were valued at Rs.24,000

The contractor had received Rs.3,60,000 in cash upto 31.03.2009 representing 80% of the work certified. Work uncertified was estimated at Rs.4,000.

Prepare the contract account.

13. A company produces a standard product. The estimated cost per unit are as follows:

Raw material Rs.4; Wages Rs.2; Variable overhead Rs.5

The semi-variable costs are:

Indirect materials Rs.235; Indirect labour Rs.156; Repairs Rs.570

The variable costs per unit included in the semi-variable costs are:

Indirect materials Re.0.05; Labour Re.0.08 and Repairs Re.0.10

The fixed costs are:

Factory Rs.2,000; Administration Rs.3,000; Selling and distribution Rs.5,000

The above costs are for 70% of normal capacity producing 700 units. The selling price is Rs.30 per unit. Prepare flexible budget for 80% of normal capacity, showing cost per unit, total cost and profit.

14. The following particulars are taken from the records of a company engaged in producing two products X and Y.

	<u>Product X</u> (Rs./unit)	<u>Product Y</u> (Rs./unit)
Sales	125	250
Material cost (Rs.2.50 per kg)	25	62.50
Direct labour (Rs.1.50 per hour)	37.50	75
Variable overheads	12.50	25

Comment on the profitability of each product, when:

- i) Raw material is in short supply
- ii) Labour hours is limited
- iii) When total labour hours available is 35,000 hrs and the maximum sales potential of each product is 1000 units, calculate the most profitable product mix and the maximum profit for that product mix, assuming fixed costs are Rs.50,000

15. Using the information below, prepare a cash budget showing expected cash receipts disbursements, and the balance for the month of June 30, 2009. Budgeted cash balance June 1, 2009 Rs.20,000. Budgeted sales and purchases are as follows:

<u>Month</u>	<u>Sales(Rs.)</u>	<u>Purchases (Rs.)</u>
May	15,00,000	8,00,000
June	16,00,000	10,00,000

Half the sales are collected in the month of sale, and the balance in the next month. 40% of purchases are paid in the month of purchase and 60% paid in next month.

Wages payable in June Rs.1,76,000

Annual insurance premium payable in June Rs.14,000.

Other expenses payable in June Rs.88,000, including depreciation for the month of June Rs.4,000

Sales commission of 5% on sales is payable in the month following sales.

Fixed deposit receipts due June 15 – Rs.3,00,000 plus Rs.20,000 interest.

A computer costing Rs.35,000 is to be purchased in June. Cash down Rs.10,000 is to be paid on delivery and the balance in 3 monthly installments of Rs.10,000 each, payable at the end of each month.

A final call of Rs.2 per share on 25,000 shares are due in June.

16. Cookwell Ltd manufactures pressure cookers, the selling price of which is Rs.300 per unit. Currently the capacity utilization is 60% with a sales turnover of Rs.18,00,000. The company proposes to reduce the selling price by 20% but desires to maintain the same profit position by increasing the output. Assuming that the increased output could be made and sold, determine the level at which the company should operate to achieve the desired objective. Also calculate the break-even sales in units, after the proposed reduction in selling price.

The following further data are available:

- i) Variable cost per unit Rs.60
- ii) Semi variable cost (including a variable element of Rs.10 per Unit) Rs.1,80,000
- iii) Fixed cost Rs.3,00,000.

17. A company manufactures a main product X which yields two by-products A and B. During the period the following data was compiled.

	A (Rs.)	X (Rs.)	Y(Rs.)
Sales	8,00,000	64,000	96,000
Cost after separation	80,000	12,800	14,400
Estimated Net profit as a percentage on sales-		20%	30%
Estimated selling expenses as a %age on sales	20%	10%	15%

The total cost before separation is Rs.3,10,400.

Prepare an income Statement showing the profit earned on the main product A.

### SECTION – C

ANSWER ANY TWO QUESTIONS:

(2 x 15 = 30)

18. The sales turnover and profit during 2 years were as follows:

Year	Sales(Rs.)	Profit(Rs.)
2006	1,50,000	20,000
2007	1,70,000	28,000

Assuming that selling price per unit, variable cost per unit and the total fixed cost for the two years remain the same, calculate:

- PV ratio
- Break even sales
- Sales to earn a profit of Rs.40,000
- Profit when sales are Rs.2,60,000
- Margin of safety when profit is Rs.50,000
- New break even sales when selling price is reduced by 20%

19. A company produces a product which passes through three processes A, B and C. 20000 units are introduced in process A at a cost of Rs.1 each. Other details are as follows:

	A	B	C
Materials consumed (Rs.)	10,000	8,000	4,000
Direct wages	8,000	6,000	3,000
Factory expenses	1,300	3,160	1,500
Normal loss (%age on input)	2%	5%	10%
Sale value of loss per unit (Rs)	0.25	0.60	1
Output in units	19,500	18,800	16,000

Prepare Process Accounts.

20. The standard cost for manufacturing 100 kgs of product X consist of:

Material A 80 kgs at Rs.2.50 per kg.

Material B 20 kgs at Rs.4 per kg

Material C 20 kgs at Re.1 per kg

During the month of January, 2000 kgs of Product X were produced. The actual materials used were as follows:

Material A 1,500 kgs at Rs.2.40 per kg

Material B 400 kgs at Rs.4.20 per kg

Material C 500 kgs at Rs.1.10 per kg

Calculate material variances

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