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

SUBJECT CODE: CM/MC/AM34

B.Com. DEGREE EXAMINATION NOVEMBER 2011
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)

1. Distinguish between Standard Cost and Marginal Cost.

2. What is an Escalation Clause in a large contract?

3. What is Zero Base Budgeting?

4. State whether the following statements are 'True' or 'False':
   a. The profit volume ratio of a product can be increased by reducing fixed expenses.
   b. Abnormal process loss is transferred to costing Profit and Loss account.
   c. Material cost variance is the difference between standard cost for standard production and the actual cost for actual production.

5. Fill in the blanks:
   a. If budgeted sales of 10,000 units, opening stock 5000 units and expected closing stock 4000 units, then budgeted production will be ....
   b. ....minus fixed cost is profit.
   c. If overhead cost variance is 500 (adverse) and volume variance is 20 (favourable), then expenditure variance will be ....

6. If margin of safety is 40%, Break even sales is Rs.300000 and profit is Rs.20,000, calculate fixed cost.

7. The following data relate to X Ltd:
   Standard sales 10,000 units at Rs.3 per unit
   Actual sales 6,000 units at Rs.3 per unit and 9000 units at Rs.2 per unit.
   Calculate sales value, volume and price variance.

8. Credit sales for January, February and March are Rs.1 lakh, Rs.1.20 lakhs and Rs.1.50 lakhs respectively. 20% of debtors are collected in the month of sales. 30% in the month following the sales and 50% in the second month following the sales. Calculate the amount collected from the debtors in the month of March.

9. From the following data calculate the amount to be credited to Profit and Loss Account.
Notional profit Rs.60,000
Works certified Rs.8 lakhs
Contract price Rs.10 lakhs
Retention money is 20% of works certified

10. From the following information calculate the total tonne kilometres and the cost per tonne kilometre:
Number of lorries 10
Capacity 5 tonnes each
Days operated 25 per month
Each lorry makes one trip a day covering a distance of 120 kilometers. Average load carried 80% of capacity.
Empty running is 40% of the total running distance.
Total cost per month Rs.3.60 lakhs

SECTION – B

ANSWER ANY FIVE QUESTIONS: (5 x 8 = 40)

11. From the following data forecast the cash position at the end of April, May and June 2010.

Month 2010	Sales Rs.	Purchases Rs.	Wages Rs.	Sales expenses Rs.
February	1,20,000	80,000	10,000	7,000
March	1,30,000	98,000	12,000	9,000
April	70,000	1,00,000	8,000	5,000
May	1,16,000	1,03,000	10,000	10,000
June	85,000	80,000	8,000	6,000

Further information:
Sales at 10% realized in the month of sales. Balance equally realized in two subsequent months.
Purchase: Creditors are paid in the month following the month of supply.
Wages : 20% paid in arrears in the following month.
Sales expenses paid in the month itself.
Income tax Rs. 20,000 payable in June.
Dividend Rs. 12,000 payable in June.
Income from investments Rs. 2,000 received half-yearly in March and September.
Cash balance on hand as on 1-4-2010 Rs.40,000.

12. Ms. Kishore & co. commenced the work on a particular contract on 1st April, 2010. They close their books of accounts for the year on 31st December each year. The following information is available from their costing records on 31st December, 2010:

	Rs.
Material sent to site	50,000
Wages paid	1,00,000
Foreman's salary	12,000

A machine costing Rs. 32,000 remained in use on site for 1/5th of the year. Its working life was estimated at 5 years and scrap value of Rs.2,000. A supervisor is paid Rs. 2,000 per month and had devoted one-half of his time on the contract.
All other expense were Rs. 15,000. The material at site was Rs. 9,000. The contract price was Rs. 4,00,000. On 31st December, 2010, 2/3 of the contract was completed, however, the architect gave certificate only for Rs. 2,00,000 on which 75% was paid.
Prepare the Contract Account.

13. The following particulars are taken from the records of a company engaged in manufacturing two products X and Y:

	Product X (Rs./unit)	Product Y (Rs./unit)
Selling price	125	250
Material cost (Rs.2.50 per kg)	25	62.50
Wages (Rs.15 per hour)	37.50	75
Variable overhead	12.50	25

Total fixed overheads are Rs.50,000.
Comment on the profitability of each product when,
a. Raw material is in short supply
b. Labour hours are limited
c. If the total availability of raw material is 20,000 kgs, and the maximum sales potential of each product is 1,000 units, determine the product mix which will yield maximum profit. Also compute the maximum profit.

14. The company manufacturers a product which passes through two processes X and Y. The following information relates to the month of February.
3000 units of raw material were introduced in Process X at a cost of Rs.5 per unit.

	Product X	Product Y
Direct wages (Rs.)	4,000	6,000
Direct expenses (Rs.)	11,000	14,780
Production overheads (%age on direct wages)	75%	125%
Output in units	2,800	2,600
Normal loss (%age on input)	10%	5%
Scrap value per unit (Rs.)	2	5

Prepare Process accounts.

15. In manufacturing the main product X, company processes the resulting waste material into two by-products A and B. During a particular week, the following data was compiled:

	Product X	By-Product A	By-Product B
Sales (Rs.)	800000	64000	96000
Cost before separation (Rs.)	310400	-	-
Cost after separation (Rs.)	80000	12800	14400
Estimated profit on sales	-	20%	30%
Estimated selling expenses(%age on sales)	20%	10%	15%

Prepare a statement showing the profit made on By-Product A.

16. From the following data relating to a lorry of 4 tonne capacity, you are required to compute:
    a. The operating cost per tonne kilometre
    b. The freight to be charged per tonne kilometre if the company wants a profit of 50% on the freight.

Cost of lorry	Rs.1 lakh
Estimated life in years	10
Maintenance	Rs.500 per month
Payment to drivers and cleaners	Rs.750 per month
Annual insurance	Rs.1200
Establishment charges	Rs.650 per month
Fuel	Rs.600 per month
Sundry expenses	Rs.2000 per annum

The lorry goes to a town 50 kms away with full load and comes back empty.
It operates for 20 days in a month.

17. The following are the budgeted figures for 2010 :

Production	5,000 units
Fixed overhead	Rs.54,000
Budgeted hours	12,000

For the month of September 2010, the following actual data is recorded :

Fixed Overhead	Rs.4,750
Hours worked	900
Production in units	480

Compute the fixed overhead variances.

SECTION – C

ANSWER ANY TWO QUESTIONS: (2 x 15 = 30)

18. You are given the following data:

Year	Sales (Rs.)	Profit (Rs.)
2010	1,20,000	8,000
2011	1,40,000	12,000

Calculate:

a. Profit volume ratio
b. Break even sales
c. Profit when sales are Rs.1,80,000
d. Sales required to earn a profit of Rs.1,20,000
e. Margin of safety in 2011.
f. New break even sales if selling price is increased by 20% and fixed cost decreases by 10%.

19. The following data relate to Process 1.
Opening work in progress 800 units valued at Rs.4,000 (Material 100% complete, labour and overheads 60% complete)
Input of materials in Process 1: 9200 units at Rs.36,800
Direct wages incurred Rs.16,740
Production overheads Rs.8,370
Units scrapped 1,200 (Material 100% complete, labour and overheads 80% complete)
Closing work in progress 900 units (material 100% complete, labour and overheads 70% complete)
7900 completed units were transferred to Process 2.
Normal loss is 8% of total input
Scrap value is Rs.4 per unit
Prepare the Process 1 account for the month of February.

20. From the following details compute material variances:

Material	Standard		Actual	
	Quantity	Rate (Rs.)	Quantity	Rate (Rs.)
A	100	10	1600	8
B	200	20	2200	26
	300		3800	
Normal loss	30		500	
	270		3300	

21. X Ltd undertook a contract on 1.1.2010 for Rs.2,50,000 for constructing a college building. The following is information relating to the contract during the year 2010.

	(Rs.)
Material sent to site	85349
Labour at site	74375
Plant installed at cost	15000
Direct expenses	3167
Establishment charges	4126
Material returned to stores	549
Works certified	1,95,000
Work uncertified	4,500
Material on site on 31.12.2010	1883
Wages accrued on 31.12.2010	2400
Direct expenses accrued on 31.12.2010	240
Cash received from Contractee	1,80,000

Of the plant installed on the contract, Plant costing Rs.5000 was returned to stores on 30th June 2010.

Depreciate Plant at 10% per annum.

Prepare Contract Account and show the entries in the Balance Sheet as on 31.12.2010.