STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2004-2005 & thereafter)

SUBJECT CODE : **CM/SC/AM34**

B.Com. DEGREE EXAMINATION NOVEMBER 2008
COMMERCE
THIRD SEMESTER

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

SECTION – A

ANSWER ALL QUESTIONS: (10 x 3 = 30)

1. What is "Cost Plus Contract"?

2. Distinguish between "Joint" and "By products".

3. What is a "Master Budget"?

4. Explain the meaning of "Limiting Factor" with an example.

5. Define "Margin of Safety".

6. X Ltd has a 5 ton truck which carries goods between 2 cities, 50 km apart. The truck makes one round trip a day carrying full capacity on the outward trip and 20% of its capacity on the return trip. It operates for 25 days in a month. The total expenses for the month is Rs.7,500. Calculate the freight the company must charge per ton kilometer if it wants a profit of 50% of freightage.

7. The budgeted fixed overheads is Rs.30,000 and production 20,000 units. The actual fixed overheads are Rs.32,000 and production 22,000 units. Calculate overhead cost, volume and expenditure variance.

8. A plans to purchase a machine for Rs.1 lakh which is expected to have a life of 5 years and a scrap value of Rs.20,000 at the end of its life. The machine is expected to bring in a profit by Rs.40,000 per annum, before providing for depreciation and tax. If the tax rate is 40% and machine is depreciated under Straight Line method, calculate its Pay back period.

9. R Ltd gives you the following data:

Year	Sales (Rs.)	Profit / Loss (Rs.)
2006	1,00,000	2,000 (loss)
2007	1,20,000	6,000 (profit)

Calculate the sales at which the Company with neither make a profit nor incur a loss.

..2

10. H Ltd gives you the following budgeted sales:
January Rs.1,00,000; February Rs.2,50,000; March Rs.1,80,000; April Rs.2,00,000 20% of the sales are for cash
Credit sales are collected as follows:
50% in the month following the sales and 45% in the subsequent month. The balance 5% being Bad Debts.
Calculate the Budgeted cash receipts for the month of April.

SECTION – B

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

11. Product X passes through processes A and B. on completion it is transferred to finished stock. From the following information, prepare Process accounts and the Finished Stock account. 1000 units costing Rs.200 per unit was introduced in Process A. other details are as follows:

	Process A	Process B
Direct wages	Rs15,600	Rs.13,200
Sundry expenses	-	Rs.2.954
Transfer to next process	940 units	870 units
Normal loss on input	5%	10%
Sale value of scrap per unit	Rs.4.50	Rs.5.75

In each process, 75% of the direct wages are charged as direct expenses.
800 units of finished goods were sold at a profit of 20% on cost.

12. The following data is obtained from the record of a factory

Sales 4000 units at Rs.25 per unit		Rs.1,00,000
Material consumed	Rs.40,000	
Labor charges	Rs.20,000	
Variable overheads	Rs.10,000	
Fixed overheads	Rs.18,000	Rs.88,000
Profit		Rs.12,000

Calculate:
a) The number of units by selling which, the company will neither lose nor gain.
b) Sales needed to earn a profit of 20% on sales.
c) Extra units which should be sold to obtain the present profit, if selling price is reduced by 20%.
d) The selling price to be fixed to bring down the break even point to 500 units under present conditions.

13. For a production of 10,000 electrical irons the following are the budgeted expenses:

	Per unit (Rs.)
Direct material	60
Direct labor	30
Manufacturing overhead (30% fixed)	50
Selling expenses (10% fixed)	15
Administration expenses (fixed)	5
Total cost:	160

Prepare a budget for 8000 electrical irons.

14. ABC transport Co is given a route 40 kms long to run a bus. The bus costs the company a sum of Rs.1,00,000. It is insured at 3% per annum and the annual tax will amount to Rs.2,000. Garage rent is Rs.200 per month. Annual repairs will be Rs.2,000 and the bus is likely to last for 5 years. Driver's salary will be Rs.300 per month and the conductor's salary Rs.200 per month. Cost of stationery will be Rs.100 per month and Manager's salary Rs.700 per month. Petrol and oil will cost Rs.50 per 100kms. The bus will make 3 round trips per day, and will operate for 25 days in a month. The bus has a capacity of 50 passengers, but actual capacity occupied will be 80%. Assuming the company wants a profit of 20% on takings, calculate the bus fare to be charged per passenger km.

15. A manufacturer of pens makes an average profit of Rs.4.50 per pen, on a selling price of Rs.14.50 by producing and selling 50,000 pens at 50% of the potential capacity. His expenses per unit are

Direct material	Rs.3
Direct wages	Re.1
Factory overheads	Rs.5 (50% fixed)
Selling overhead	Rs.1 (75% fixed)

During the current year he intends to produce the same number of units, but anticipates that:

a) Fixed expenses will go up by 10%
b) Material and labor costs will go up by 3% each
c) Selling prices will remain unchanged

Under these circumstances, he obtains an order for a further 20% of his capacity. What is the minimum price you would recommend to accept the order, to ensure an overall profit of Rs.2,45,350?

16. The following data relate to Product X. You are required to compute Material and Labor Variances:

Standard Cost per unit

Material	50 kgs at Rs.40 per kg
Labor	400 hours at Re.1 per hour

The actual cost for production of 100 units of X comprised of

Material	4900 kgs at Rs.42 per kg
Labor	39,600 hours at Rs.1.10 per hour.

17. A factor is engaged in the production of Chemical X and in the course of its manufacture a by product Y is produced, which after a separate process has a commercial value. The following are the expenses for the month of January:

Total expenses upto split off point Rs.34,350

Separate expenses for X and Y were as follows:

	X(Rs.)	Y(Rs.)
Material	7,360	780
Labor	7,680	2,642
Overheads	1,500	544

142 tons of X and 49 tons of Y were produced.

The selling price of Y was Rs.280 a ton, on which a profit of 50% was made. Prepare a statement showing the profit on X assuming X was sold at Rs.400 per tonne.

..4

SECTION – C

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

18. The following data is available in respect of Process 1:
Opening stock of work in progress 800 units costing Rs.4,000 (material 100%; labor and overheads 60% complete)
9200 units were introduced in Process 1 costing Rs.36,800.
Direct wages incurred were Rs.16,740 and Production overheads were Rs.8,370.
Units scrapped were 1200 (material 100%; labor and overheads 80% complete)
Closing work in progress were 900 units (material 100%; labor and overheads 70% complete)
7,900 units were completed and transferred to Process 2
Normal loss is 8% of total input.
Scrap realized Rs.4 per unit.
You are required to:
a) Compute equivalent production b) Calculate cost per equivalent unit for each element c) Prepare process 1 account.

19. The following information relate to a contract for Rs.10 lakhs:

	2006 (Rs.)	2007 (Rs.)
Material issued	3,00,000	84,000
Direct wages	2,30,000	1,05,000
Direct expenses	22,000	10,000
Indirect expenses	6,000	1,400
Work certified	7,50,000	10,00,000
Work uncertified	8,000	--
Material at site	5,000	7,000
Plant purchased	14,000	2,000

The contractee pays 80% of the work certified in cash.
The value of plant at the end of 2006 and 2007 were Rs.7,000 and Rs.5,000 respectively.
Prepare Contract account and the Contractee's account.
Also show the Balance Sheet on 31/12/2006.

20. A company expects to sell 1,00,000 tins of product X during the last quarter of 2008 at a selling price of Rs.60 per tin. Each tin requires 1 kg of material A and 2 kgs of material B. Stock levels are planned as follows:

	Stock on 1.101.08	Stock on 31.12.08	Purchase price/kg
Finished tins of X	20,000	15,000	--
Material A (kgs)	18,000	22,000	Rs.10
Material B (kgs)	26,000	30,000	Rs.8
No. of empty tins	24,000	28,000	Rs.2 per tin

The time required to produce 1 tin of X is 20 minutes at Rs.12 per hour. Variable manufacturing overheads are 0.75 per tin and fixed manufacturing overheads are Rs.8,000 per month. Variable selling expenses are 50 paise per tin sold and Fixed selling expenses are Rs.12,000 per quarter. Prepare for the quarter ended 31.12.2008.
a) production budget
b) purchase budget
c) budgeted variable cost per tin

21. A Ltd plans to purchase a machine for Rs.1,40,000 and spend Rs.20,000 on its installation. The machine has a life of 5 years and scrap value of Rs.10,000. The machine is expected to yield the following profits after depreciation but before tax:

YEAR	PBDT Rs.	P/V of Re.1 at 10%
I	25,000	0.91
II	40,000	0.83
III	60,000	0.75
IV	45,000	0.68
V	30,000	0.62

Assume a tax rate of 50% and depreciation is provided under Straight Line method, calculate:

a) Pay back period
b) Return on average investment
c) Net present value (cost of capital 10%)

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