

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.  
(For candidates admitted during the academic year 2004-05 & thereafter)

SUBJECT CODE : CM/MC/CM24

**B.Com. DEGREE EXAMINATION APRIL 2008**  
COMMERCE  
SECOND SEMESTER

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

**SECTION – A**

ANSWER ALL QUESTIONS: ( 10 x 3 = 30 )

1. Define cost accounting and state its objectives.
2. What is EOQ and its significance?
3. State the difference between bin card and stores ledger.
4. What is Cash flow statement and why should it be prepared by all companies?
5. Calculate the Economic Order Quantity from the following information:  
The manufacturer buys certain equipment from outside suppliers at Rs.30 per unit.  
Total annual needs are 800 units; Annual return on investment 10%.  
Rent, insurance and taxes per unit per year Re.1;  
Cost of placing an order Rs.100.
6. Calculate cash from operating activity from the following particulars:  
Net cash operating profit for the year ending 31 March 2007      Rs.75,000  
Accrued income on 1-4-2006      Rs.6,000  
Prepaid expenses on 1-4-2006      Rs.8,000  
Accrued income on 31-3-2007      Rs.12,000  
Prepaid expenses on 31-3-2007      Rs.14,000  
Provision for doubtful debts on 1-4-2006      Rs.2,000  
Provision for doubtful debts on 31-3-2007      Rs.400
7. The capital structure of a company is as follows:  
7% Preference shares of Rs.100 each      Rs.6,00,000  
Equity shares of Rs.10 each      Rs.16,00,000  
Profit after taxation at 50%      Rs.5,42,000  
Calculate Earnings per share.
8. Standard time allowed for a certain job is 50 hours. The hourly rate of wages is Rs.20 per hour. The actual time taken by the workers was 40 hours. Calculate total wages on a) Piece basis, b) Halsey plan.

9. The following annual charges are incurred in respect of a machine in a factory where work is done by means of five machines of exactly similar type : (50 weeks of 48 hours/week)  
 Rent and rates for the factory Rs.4,000  
 Depreciation on each machine is Rs.400  
 Power consumed as per meter at 1 Rs per unit  
 Electric charges for light in the shop Rs.540  
 There are Two Attendants for the five machines and each is paid Rs.600 per month.  
 The machine uses 10 units of power per hour. Calculate the machine hour rate of the machine.
10. Prepare a Common size Balance Sheet from the following: (Rs. in lakhs)

LIABILITIES	2006	2007	ASSETS	2006	2007
Capital	46	52	Fixed assets	50	60
7% Debentures	4	15	Current Assets	30	25
Current liabilities	30	23	Fictitious assets	--	5
	<u>80</u>	<u>90</u>		<u>80</u>	<u>90</u>

### SECTION – B

ANSWER ANY FIVE QUESTIONS:

( 5 x 8 = 40 )

11. Prepare a Cost Statement from the following particulars relating to the year ended 31<sup>st</sup> March 2007: Material bought 10000 units at Rs.25 each; Direct labour Rs.20 per labour hour and in the year 12,000 labour hours were spent. Factory rent Rs.3,000 per month; Insurance Rs.200 per quarter; Electricity Rs.1,000 per month and power at Rs.2 per labour hour; Supervisor's salary Rs.1,200 per month and selling expenses @ 10% of cost of goods sold. Sales for the year Rs.6,60,000.
12. Find out the Maximum level, Minimum level and Average stock level and Reordering level from the following particulars:  
 Reordering quantity 3000 units; Reordering period 4 to 6 weeks  
 Normal usage 3,000 units per week; Minimum usage 1500 units per week;  
 Maximum usage 4,500 unit per week.
13. During first week of April 2002 the workmen Mr.Kalyan manufactured 300 articles. He receives wages for a guaranteed 48 hours week at the rate of Rs.4 per hour. The estimated time to produce one article is 10 minutes and under incentive scheme the time allowed is increased by 20%. Calculate his gross wages according to:  
 i) Piece – work with a guaranteed weekly wage.  
 ii) Rowan premium bonus, and  
 iii) Halsey premium bonus 50% to workman.

14. From the following particulars compute the hourly rate of Machine installed in a shop.

	Rs.
Cost of the machine	20,000
Estimated scrap value, after expiry of its life 10 years	4,000
Rent and Rates of the shop per quarter	600
General lighting for the shop	40 p.m.
Shop Supervisor's salary	400 p.m.
Insurance premium for the shop	10 p.m.
Estimated repairs and maintenance expenses	200 per year
Power consumption of the machine	2 units per hour
Rate of Power	100 units – Rs.10
Estimated working hours of the machine per year	2,000

The machine occupies 1/4<sup>th</sup> of the total floor area of the shop. The supervisor of the shop devotes 1/5<sup>th</sup> of his time for supervising the machine. General lighting expenses are to be apportioned on the basis of floor area.

15. The following are summarized Profit and Loss A/c for the year ending 31-12-2002 and the Balance Sheet as at the date:

**TRADING AND PROFIT & LOSS ACCOUNT**

	Rs.		Rs.
To Opening Stock	10,000	By Sales	1,00,000
To Purchases	55,000	By Closing Stock	15,000
To Gross Profit	50,000		
	1,15,000		1,15,000
To Administrative Exp.	15,000	By Gross Profit	50,000
To Interest	3,000		
To Selling Expenses	12,000		
To Net Profit	20,000		
	50,000		50,000

**BALANCE SHEET**

	Rs.		Rs.
Capital	1,00,000	Land and Buildings	50,000
Profit & Loss A/c	20,000	Plant and Machinery	30,000
Creditors	25,000	Stock	15,000
Bills Payable	15,000	Sundry Debtors	15,000
		Bills Receivable	12,500
		Cash in Hand and at	
		Bank	17,500
		Furniture	20,000
	1,60,000		1,60,000

You are required to calculate

- i) Operating Ratio
- ii) Operating Profit Ratio
- iii) Stock turnover Ratio
- iv) Debtors turnover Ratio
- v) Current Ratio

- vi) Return on capital employed
- vii) Working capital turnover Ratio.
- viii) Debt-equity Ratio.

16. Prepare a reconciliation statement, taking into account the following details for the year 2005 – 06:

	Rs.
Net profit as per costing records:	1,50,000
Works overheads under recovered	10,000
Office overheads under recovered	15,000
Depreciation under charged in Financial accounts	5,000
Income tax paid as per the financial accounts	2,000
Dividends received	800
Good will written off	1,500
Debenture interest paid	1,800
Notional rent in cost accounts	3,000

17. From the following balance sheets as on 31 March 2006 and 2007 you are required to prepare a cash flow statement:

LIABILITIES	31.3.2006	31.3.2007	ASSETS	31.3.2006	31.3.2007
Share capital			Fixed Assets		
	50,000	75,000		50,000	75,000
P& L a/c	25,000	40,000	Investments	25,000	40,000
General			Good will	25,000	20,000
Reserve	15,000	20,000	Debtors	25,000	40,000
6% Bonds	25,000	30,000	Bills		
Creditors	15,000	20,000	Receivable	5,000	10,000
Expenses			Bank	5,000	7,500
overdue	5,000	7,500			
	1,35,000	1,92,500		1,35,000	1,92,500

### SECTION – C

ANSWER ANY TWO QUESTIONS:

( 2 x 15 = 30 )

18. From the following details prepare a statement showing the price to be quoted so as to give the same percentage of net profit on turnover as was realized during the six months ending 30<sup>th</sup> June 2000.

Stock of raw materials as on 1.1.2000	Rs.12,500
Stock of raw materials as on 30.6.2000	15,000
Purchases of materials during six months	1,20,000
Factory wages during six months	70,000
Indirect wages during six months	15,000
Supervisor's salary per month	3,000
Other overheads 40% on Factory wages.	
Opening stock of completed goods 50 units costing Rs.20 each	
Closing stock of completed goods 100 units.	
Sales during six months	3,22,000

The number of radio sets manufactured during these six months was 1450 sets including those stocked at the end of the period. The radios to be quoted are of uniform quality and size as were manufactured during the six months to 30<sup>th</sup> June 2000. As from August 1 the cost of factory labour has gone up by 10% and a discount of Rs.20 per radio set should be given to the buyer.

19. For the six months ended 31<sup>st</sup> October 2000 an importer distributor of a washing machine has the following transactions in his records. There was an opening balance of 100 units which had a value of Rs.3,90,000.

From the information prepare the Stores Ledger under LIFO method:

On 31<sup>st</sup> October 2000 it was found that 10 units were short.

Month	Bought (in units)	Cost per unit	Sold (in units)
May	100	4100	
June	200	5000	
July			250
August	400	5200	
Returned to supplier	5		
September			350
October			100
Returned by a customer			2

20. Strongman Ltd. has three production departments A, B and C and two service departments X and Y.

The following particulars are available for the month of March, 2002 concerning the organization:

	Rs.
Rent	15,000
Municipal Taxes	5,000
Electricity	2,400
Indirect Wages	6,000
Power	6,000
Depreciation on Machinery	40,000
Canteen Expenses	30,000
Other labour relates costs	10,000

Following further details are also available:

	Total	A	B	C	X	Y
Floor Space (Sq. mts.)	5,000	1,000	1,250	1,500	1,000	250
Light Point (Nos.)	240	40	60	80	40	20
Direct Wages (Rs.)	40,000	12,000	8,000	12,000	6,000	2,000
Horse Power of machines (Nos.)	150	60	30	50	10	---
Cost of machine (Rs.)	2,00,000	48,000	64,000	80,000	4,000	4,000

The expenses of service departments are to be allocated in the following manner:

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

You are requested to calculate the overhead of the production department.

21.

LIABILITIES	31.3.2005	31.3.2006	ASSETS	31.3.2005	31.3.2006
Share capital			Land and building	1,50,000	1,40,000
Reserve & surplus	3,00,000	3,40,000	Plant and machinery	1,83,000	2,68,000
Mortgage loan	1,20,600	1,43,600	Trade Investments	42,300	35,100
Prov. For depreciation	20,000	19,000	Marketable securities	32,200	10,000
Prov. For taxation	25,600	34,000	Good will	16,900	12,100
Creditors	11,000	12,400	Debtors	9,800	16,000
Expenses outstanding	42,400	45,200	Stock	42,000	65,200
	2,600	1,000	Bank	45,600	48,800
	<u>5,22,200</u>	<u>5,95,200</u>		<u>5,22,200</u>	<u>5,95,200</u>

The following transactions took place during 2005-06:

Land which had cost Rs.10,000 was sold for Rs.25,000;

Some of the marketable securities were sold at a loss of Rs.3,000.

Difference between the figures to trade investments represents amount written off in respect of worthless investment.

An old machinery which had cost Rs.2,000 (accumulated depreciation thereon Rs.8,000) was sold for Rs.6,000.

Prepare the statement showing the changes in working capital and the Fund Flow statement with all the workings.

