

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2011 – 2012)

SUBJECT CODE: 11CM/PC/CC14

M.Com. DEGREE EXAMINATION NOVEMBER 2011
COMMERCE
FIRST SEMESTER

COURSE : CORE
PAPER : COST DETERMINATION AND COST CONTROL
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

I. Answer ALL

(10 x 2 = 20)

1. What is perpetual inventory system?
2. Explain EOQ.
3. Distinguish between joint product and by-product.
4. Differentiate between job costing and process costing.
5. Cost per unit decreases as volume increases-Explain
6. Calculate the ton kilometers run by a truck from the following details.
Distance traveled 200 kms per day.
Normal loading capacity 100 tons.
Wastage in loading 10%.
Percentage of vehicles under repair 5%.
Effective days in a month 25.
7. How much of profit would you allow to be considered in the following case?
Rs.
Cost incurred so far for contract : 2,80,000
Contract price : 5,00,000
Cash received : 2,70,000
Uncertified work : 30,000
8. A manufacturing company introduces 100 units at a cost of Rs. 9,600/-. It incurs a further expense of Rs. 4,800 in the process. A normal wastage of 5% of input is estimated which will fetch Rs. 10 per unit as a scrap value. The output of the process was 90 units. Find the value of abnormal wastage.
9. Find out the value of closing stock under LIFO.
Purchase of Material on 1-6-09 2000 units @ Rs 20 per unit.
Purchase of Material on 8-6-09 1200 units @ Rs 22 per unit
Issue on 10-6-09 : 1800 units
10. A Company buys its annual requirement of 36000 units in 6 instalments. Each Unit costs Re. 1/- and ordering cost is Rs. 25/-. The inventory carrying cost is estimated at 20% of unit value. Find EOQ

II. Answer any FIVE Questions

(5 x 8 = 40)

11. The budgeted overheads and costs driver volumes of XYZ Ltd. are as follows:

Cost pool	Budgeted Overhead(Rs.)	Cost driver	Budgeted volume
Material Procurement	5,80,000	No. of Orders	1,100
Material handling	2,50,000	No. of movements	680
Set- up	4,15,000	No. of set –ups	520
Maintenance	9,70,000	Maintenance Hours	8,400
Quality Control	1,76,000	No of Inspection	900
Machinery	7,20,000	No of Machinery Hours	24,000

The company has produced a batch of 2600 components of AX-15 , its material cost was Rs. 1,30,000 and Labour cost was Rs. 2,45,000. The usage activities of the set batch are as follows

Material Orders - 26	Maintenance Hours - 690
Material Movements – 18	Inspection- 28
Set- Ups - 25	Machine Hours – 1,800

Required:

- a. Calculate Cost Driver rates that are used for tracing appropriate amount of Over heads to the said batch.
- b. Ascertain the batch of components using ABC.

12. You are given the data relating to a passenger company, Suraj Travels for January.

Calculate the cost per passenger kilometre.

Staff salary Rs. 26,400; Diesel Oil Rs. 3,000; Insurance Premium Rs. 3,900; Lubricating oil Rs. 200; Depreciation Rs. 5,500; Spares Rs. 300; Tyres and Tubes Rs. 700. The Company runs two buses and each of them can accommodate 50 Passengers. The bus run between two cities and the distance between them 150 kms. The number of days on which the buses had run during the month are 30 and each bus made one round trip daily. On the average, the seating capacity utilized was 80%.

13. In a factory, there are two service departments S1 and S2 and three production departments P1, P2, and P3. In April 1998, the departmental expenses were:

Departments	P1	P2	P3	S1	S2
Rs.	6,50,000	6,00,000	5,00,000	1,20,000	1,00,000

The service department expenses are allotted on a percentage basis as follows:

Service Departments	Production Deptts.			Service Deptts.	
	P1	P2	P3	S1	S2
S1	30	40	15	--	15
S2	40	30	25	5	--

Prepare a statement showing the distribution of the two service department expenses to the three departments by Simultaneous Equation Method.

14. A company manufactures three joint products A,B and C. The actual joint-expenses Rs. 8,000. Profit on each product as a percentage of sales would be 30%, 25% and 15% respectively. Subsequent expenses were as follows:

	A	B	C
	Rs.	Rs.	Rs.
Materials	100	75	25
Labour	200	125	50
Overheads	150	125	75
Sales	6,000	4,000	2,500

Prepare a statement apportioning joint expenses on the basis of reverse cost method.

15. Ace Ltd. manufactures a product and the following particulars are collected for the year ended March, 2000.

Monthly demand(units)	1,000
Cost of placing an order(Rs.)	100
Annual carrying cost(Rs. per unit)	15
Normal usage(units per week)	50
Minimum usage(units per week)	25
Maximum usage(units per week)	75
Re-order period(weeks)	4-6

You are required to calculate (i) Re-order quantity, (ii) Re-order level, (iii) Minimum level, (iv) Maximum level, (v) Average stock level.

16. 10,000 units of raw materials are introduced into a process at cost of Rs. 20,000. Wages and overheads for the process are Rs. 5,100 and Rs. 3,400 respectively. 7,500 units were completed; of the remaining 2,500 units on the average 40% work has been done in respect of labour and overheads. Ascertain the cost of completed units and work-in-progress at the end.

17. From the following particulars you are required to prepare a statement showing the (a) Cost of materials consumed, (b) Prime Cost, (c) Works Cost, (d) Total Cost, (e) Percentage of works overheads to productive wages and (f) Percentage of general overheads to works cost:

	Rs.		Rs.
Stock of Finished Goods on 1-1-2008	72,800	Productive wages	5,16,880
Stock of Raw Materials on 1-1-2008	33,280	Stock of Finished Goods on 31-12-2008	78,000
Purchase of Raw Materials	7,59,200	Stock of Raw Materials on 31-12-2008	35,360
Sale of Finished Goods	15,39,200	Works Overhead Charges	1,29,220
		Office & General Expenses	70,161

The Company is about to send a tender for a large plant. The Costing Department estimated that the materials required would cost Rs. 52,000 and the wages to workmen for making the plant would cost Rs. 31,200. The tender is to be made at a net profit of 20% on the selling price. Show what the amount of tender would be if based on the above percentages.

18. Compute the Machine Hour Rate from the following data:

	Rs.
Cost of machine	1,00,000
Installation charges	10,000
Estimated scrap value after the expiry of its life (15 years)	5,000
Rent and Rates for the shop per month	200
General lighting for the shop per month	300
Insurance premium for the machine per annum	960
Repairs and Maintenance expenses per annum	1,000
Power consumption-10 units per hour	---
Rate of power per 100 units	20
Estimated working hours per annum – 2,200	
This includes setting up time of 200 hours	---
Shop supervisor's salary per month	600

The machine occupies 1/4th of the total area of the shop. The supervisor is to devote 1/5th of his time for supervising the machine.

SECTION C

III. Answer any TWO Questions:

(2 x 20 = 40)

19. Union Transport Company supplies the following details in respect of a truck of 5 tonne capacity :

Cost of truck	Rs. 4,50,000
Estimated life	10 years
Diesel, oil, greese	Rs. 150 per trip each way
Repairs and Maintenance	5,000 per month
Drivers' wages	5,000 per month
Cleaners' wages	2,500 per month
Insurance	4,800 per year
Tax	2,400 per year
General supervision charges	4,800 per year

The truck carries goods to and from the city covering a distance of 50 km. each way

In outward trip, freight is available to the extent of full capacity and on return 20% of capacity. Assuming that the truck runs on an average of 25 days a month, work out:

(a) Operating cost per tonne-km,

(b) Rate per tonne per trip that the company should charges if a profit of 50% on freight is to be earned.

20. The following balances were extracted from the books of a building contract on 31st March 2009 regarding Contract No. 123.

	Rs.
Materials issued to site	62,720
Wages paid	73,455
Wages outstanding on 31.3.2009	720
Plant issued to site	6,000

Direct charges paid	2,515
Direct charges outstanding on 31.3.2009	210
Establishment charges	5,650
Stock materials at site on 31.3.2009	1,200
Value of work certified on 31.3.2009	1,65,000
Cost of work not yet certified	3,500
Cash received	1,41,075

The work was commenced on April 1, 2008 and the contract price agreed at Rs. 2,45,000. Prepare contract account for the year providing for depreciation of plant at 25%. Calculate the profit or loss in the contract to date and make such provision in the contract account as you consider desirable. Set out also Contractors Balance Sheet so far as it relates to the contract account.

21. A Product is manufactured by passing through three processes A, B and C. For The first week in January, the actual data included. The following information is obtained from the accounts for the month ending March, 2005:

Items	Process		
	A Rs.	B Rs.	C Rs.
Direct material (6000 units)- Rs.	12,000	-	-
Direct materials added (Rs.)	5,000	9,000	4,000
Direct wages (Rs.)	4,000	6,000	2,000
Direct expenses (Rs.)	800	1,680	2,260
% of Normal Loss to input	5%	10%	5%
Output (in units) during the month	5,760	5,100	4,880
Value of scrap per unit(Rs.)	1.5	2	4

You are required to prepare

- (1) Accounts for processes A, B, and C.
 - (2) Abnormal loss and abnormal gain accounts.
22. Prepare a statement showing the pricing of issues, on the basis of
- (a) Simple Average, and
 - (b) Weighted Average Methods from the following information pertaining to material 'X'.

Date

Sep 2010	1	Purchased 100 units @ Rs. 10.00 each.
	2	Purchased 200 units @ Rs. 10.20 each.
	5	Issued 250 units to Job A vide MR No. 1.
	7	Purchased 300 units @ Rs. 10.50 each.
	10	Purchased 200 units @ Rs. 10.80 each.
	13	Issued 200 units to Job B vide MR No. 2.
	18	Issued 200 units to Job C vide MR No. 3.
	20	Purchased 200 units @ Rs. 11.00 each.
	25	Issued 150 units to Job D vide MR No. 4.
