

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

SUBJECT CODE: 11CM/PC/CC14
M.Com. DEGREE EXAMINATION NOVEMBER 2012
COMMERCE
FIRST SEMESTER

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

SECTION – A

I. Answer ALL questions: (10 x 2 = 20)

1. Explain the difference between fixed cost and semi-variable cost.
2. What do you mean by Activity Based Costing?
3. Write a note on Job Costing.
4. What is 'Equivalent Production'?
5. Mention any two objectives of Transport Costing.
6. From the following particulars, Calculate the Economic Order Quantity
Annual consumption 1,600 units
Cost of Material per unit Rs.40
Cost of placing and receiving one order Rs.50
Annual carrying cost of inventory 10% of inventory value.
7. Compute the cost of material consumed from the following information :

	Rs.
Stock of material on 1.1.2012	2,00,000
Stock of material on 31.1.2012	50,000
Purchase of material	5,00,000
Carriage on purchases	10,000
Scrap value of material used	5,000
8. A transport company operates 4 Buses on a route 100 kms.long. Each bus makes three round trips per day on all 30 days in a month. On an average 20% of the vehicles are in garage for repairs and maintenance. Ascertain the total distance covered by the buses in one month period.
9. From the following information calculate the labour turnover rate by applying Replacement method.
Number of workers at the beginning of the period : 3,800
Number of workers at the end of the period : 4,200
During the year, 40 workers left while 160 workers are discharged. 600 workers are required during the year, of these 150 workers are recruited to fill up vacancies and the rest are engaged on account of an expansion scheme.

10. During February 2006, works overhead incurred in a factory was Rs.40,000 the machine hours worked during the month were 8,000 hours. Determine the machine hour rate to be charged to the output to recover the works overhead.

SECTION – B

II. Answer any FIVE Questions

(5 x 8 = 40)

11. Two components A and B are used as follows:
 Normal usage 50 units per week each
 Minimum usage 25 units per week each
 Maximum usage 75 units per week each
 Re-order quantity A – 300 units; B – 500 units.
 Re-order period : A – 4 to 6 weeks; B – 2 to 4 weeks.
 Calculate for each components:
 (a) Re-order level (b) Minimum level (c) Maximum level (d) Average stock level
12. X industries Ltd, are the manufacturers of Moonlight Torches. The following data relate to manufacture of Torches during the month of March 1991.
 Raw materials consumed Rs.20,000
 Direct wages Rs.12,000
 Machine hours worked 9,500 hours
 Machine hour rate Rs.2
 Office overheads 20% of works cost
 Selling overheads 50paise per unit
 Units produced 20,000 units
 Units sold 18,000 @ Rs.5 per unit.
 Prepare Cost sheet showing the cost and the profit per unit and the total profit earned.
13. Prepare statement of Equivalent production, statement of cost and Process Account from the following information:
 Units put into process 2,500
 Units completed 2,000
 Work-in-progress at the end 500 units
 Process cost : Rs.
 Materials 22,500
 Labour 6,750
 Overheads 2,250
 Work-in-progress is completed 50% as to materials, labour and overheads.
14. Calculate the normal and overtime wages payable to a workman from the following data:
- | <u>Days</u> | <u>Hours worked</u> |
|-------------|---------------------|
| Monday | 8 |
| Tuesday | 10 |
| Wednesday | 9 |
| Thursday | 11 |
| Friday | 9 |
| Saturday | 4 |
- Normal working hours :- 8 hours per day
 Normal rate :- Rs.0.50 per hour
 Overtime rate : Up to 9 hours in a day at single rate and over 9 hours in a day at double rate or upto 48 hours in a week at single rate and over 48 hours at double rate, whichever is more beneficial to the workman.

15. Work out in the appropriate form the Machine hour rate of a saw mill with reference to the following items of information extracted from the account books of a woodworking shop.
- Purchase price of saw mill Rs. 90,000
 - Freight, other incidental and installation charges Rs.10,000
 - Life of saw mill is 10 years @ 2,000 working hours per year.
 - Repair charges: 50% of depreciation.
 - Consumption of electric power: 10 units per hour @ 7 paise per unit.
 - Lubricating oil @ Rs.2 per day of 8 hours.
 - Consumable stores @ Rs.10 per day of 8 hours.
 - Wages for machine operator @ Rs.4 per day of 8 hours.

16. The following details are available in respect of Process 'A' and 'B' for May 1998.

	Process A	Process B
Materials consumed	50,000	10,000
Wages	20,000	30,000
Overheads	10,000	10,000

Process 'A' transfers its outputs to process 'B' at a profit of 20% on transfer price and process 'B' transfers its products to finished stock at 20% on cost. The finished goods are sold for Rs.2,00,000. Prepare the Process accounts, Finished stock account and Profit and Loss account showing the total profit for the month, assuming the sundry expenses were Rs.20,000, which were not apportioned to the processes.

17. From the following information of ABC construction company prepare the Contract account for 1997. Also show what part of the profit on the contract should be transferred to profit and loss account. The contract was for Rs.8,00,000.

Materials issued from stores	1,50,000
Wages paid	2,20,000
General charges	8,000
Plant installed at site on 1 st July 1997	40,000
Materials on hand at close	8,000
Wages accrued due	8,000
Work certified	4,00,000
Work completed but not certified	12,000
Cash received	3,00,000
Materials transferred to other contracts	8,000
Materials received from other contracts	2,000

Depreciation on Plant is to be provided at 10% per annum.

18. Mr .S is the owner of a fleet of taxis and the following information are available from the records:

Number of taxis 10
 Cost of each taxi Rs.2,00,000
 Salary of manager Rs.6,000 p.m.
 Salary of accountant Rs.5,000 p.m.
 Salary of cleaner Rs.2,000 p.m.
 Salary of mechanic Rs.4,000 p.m.
 Garage rent Rs.6,000 p.m.
 Insurance premium 5% per annum

Annual tax Rs.6,000 per taxi
 Drivers salary Rs.2,000p.m.per taxi
 Annual repair Rs.10,000per taxi
 Total life of a taxi is 2,00,000 kms. a taxi runs in all 3,000kms. in a month, of which 30%, it runs empty. Petrol consumption is one liter for 10 kms. at Rs.30per liter. Oil and other expenses are Rs.50 per 100 kms.
 Calculate the cost of running a taxi per km.

SECTION – C

III. Answer any TWO Questions:

(2 x 20 = 40)

19. The following extracts on costing information relate to commodity 'A' for the year ending 31.12.1985.

Purchase of raw materials	48,000
Direct wages	40,000
Stock on 1-4-1984 of raw materials	8,000
Finished goods 1,600 units	6,400
Stock on 31-3-1985 of raw materials	8,800
Finished goods 3,200 units	-
Works on cost	16,800
Work-in-progress:	
1 st April 1984	1,920
31 st March 1985	6,400
Office and administration overheads	3,200
Sales (finished product)	1,20,000

Advertising, discount allowed and selling cost are Re.0.40 per unit. During the year, 25,600 units of commodity were produced.

Calculate cost of production and extend the cost sheet to include profit also so that it may also be called production statement.

20. A product passes through two processes and then to finished stock. The normal wastage of each process is as follows:

Process 'A' 3% and Process 'B' 5%.

The wastage of process A was sold @ Rs.5 per unit and that of process 'B' at Rs.10 per unit. 20,000 units were introduced into process A at the beginning of January 2011 at a cost of Rs.40 per unit.

Other expenses were as under:

	Process A	Process B
Sundry materials	40,000	60,000
Wages	2,00,000	3,20,000
Manufacturing expenses	30,000	28,500

The output of process A was 19,000 units and that of Process B 18,200 units. Prepare the Process Accounts, Normal loss Account, Abnormal loss Account and Abnormal gain Account.

21. A Company has three production production departments A, B and C and two service departments X and Y.

The following particulars are available for January, concerning the organisation.

	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 related costs	10,000

Following further details are also available:

Particulars	Total	Production department			Service department	
		A	B	C	X	Y
Floor Space [Sq.mts.]	5,000	1,000	1,250	1,500	1,000	250
Light point [No.s]	240	40	60	80	40	20
Direct wages [Rs.]	40,000	12,000	8,000	12,000	6,000	2,000
Horse power of machine [No.s]	150	60	30	50	10	
Cost of machines [Rs.]	2,00,000	48,000	64,000	80,000	4,000	
Working hours		2,335	1,510	1,525		4,000

The expenses of services 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 required to calculate the overhead absorption rate in the three production department.

22. From the following particulars, prepare stores ledger by adopting Simple average method and Weighted average method of pricing of material issues.

Date	Receipts	Issues
1990 Jan 1	300 units at Rs.10 per unit	
10	200 units at Rs.12 per unit	
12	400 units at Rs.11 per unit	
15	-----	250 units
16	-----	150 units
18	200 units at Rs.14 per unit	
20	-----	300 units
22	300 units at Rs.15 per unit	
25	100 units at Rs.16 per unit	
27	-----	200 units
31	-----	100 units.
31	Shortage 20 units.	
