STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.

(For candidates admitted during the academic year 2004-05 & thereafter)

SUBJECT CODE: CM/MO/CC44

B.Com. DEGREE EXAMINATION APRIL 2008

COMMERCE FOURTH SEMESTER

COURSE : MAJOR – OPTIONAL PAPER : COST CONTROL

TIME : 3 HOURS MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS:

 $(10 \times 3 = 30)$

- 1. State the objectives of cost control.
- 2. What are the assumptions of marginal costing.
- 3. Write a brief note on flexible budget.
- 4. State the difference between standard costing and budgetary control.
- 5. What is assignment problem.
- 6. You are required to compute the economic ordering quantity and the frequency of the orders in terms of days from the data given below:

 Consumption of material per annum Rs.8,000

 Ordering costs per order Rs.25

Storage and carrying cost per annum 10% of inventory value.

- 7. From the following data calculate:
 - a) P/v Ratio. b) Variable cost and c) Profit sales Rs.80,000, Fixed expenses Rs.15,000, Break even point Rs.50,000.
- 8. Prepare a flexible budget for production of 4000 units. The expenses for production of 5000 units in a factory are as follows:

Cost/Units

Material Rs.40

Factory expenses (30% fixed) Rs.30 Administration expenses (100% fixed) Rs.5.

9. You are required to calculate labour cost & rate variance from the following data:

Standard rate of wages per hour Rs.10

Standard hours – 300

Actual rate of wages per hour Rs.12

Actual hours – 200.

10. Find the initial feasible solution by North – West corner method:

	W1	W2	W3	W4	
F1	48	60	56	58	140
F2	45	55	53	60	260
F3	50	65	60	62	360
F4	52	64	55	61	220
Demand	200	320	250	210	_

SECTION - B

ANSWER ANY FIVE QUESTIONS:

 $(5 \times 8 = 40)$

11. Compute the various stock level from the following data

Maximum consumption in a month – 300 units

Minimum usage in a month – 200 units

Average usage in a month – 225 units

Time log for procurement of materials -

Maximum 6 months

Minimum 2 months

Re order quantity – 750 units.

12. The following particulars are extracted from the records of a company –

	Product A	Product B
	Rs.	Rs.
Sale 1 unit	100	120
Material cost	10	15
Direct wages	15	10
Direct expenses	5	6
Variable overhead	15	20
Consumption of material	2kg	3kg
Machine hours used	3hrs	2hrs

Direct wage per hour is Rs.5. Comment on the profitability of each product when

- a) Total sales potential in units is limited
- b) Production capacity (in terms of machine hours) is the limiting factor
- c) Material is in short supply
- d) Sales potential in value is limited.
- 13. A factory is currently working at 50% capacity and produced 10,000 units at a cost of Rs.180 per unit as per details below:

			Rs.
Materials			100
Labour			30
ъ.	1	4	20

Factory overheads 30 (Rs.12 fixed) Administrative overheads 20 (Rs.10 fixed)

The current selling price is Rs.200 per unit. At 60% working selling price per unit falls by 2%.

At 80% working, selling price per unit falls by 5%. Estimate profits of the factory at 60% and 80% working.

14. Find out labour variances from the following particulars:

Standard Actual

Output	-	100 units		-	1200 units
Rate of payment	-	Rs.6/unit	wages paid	-	Rs.8,000
Time taken	-	50 hrs		-	40 hrs.

15. A transport corporation have three vehicles in three cities. Each of vehicles can be assigned to any of the four other cities. The distance differs from one city to another as under:

	W	X	Y	Z
A	33	40	43	32
В	45	28	31	23
C	42	29	36	29

You are required to assign a vehicle to a city in such a way that the total distance traveled is minimized.

16. Test the following initial solution for optimality.

	W1	W2	W3	W4	Supply
F1	48	60 60	56 30	58 50	140
F2	45	55 260	53	60	260
F3	50 200	65	60	62 160	360
F4	52	64	55 220	61	220
Demand	200	320	250	210	l

17. A manufacturing company used Rs.50,000 materials per year. The administration cost per purchase is Rs.50, and the carrying cost is 20% of the average inventory. The company currently has on optimum purchasing policy but has been offered a 0.4% discount if they purchase five times per year should the offer be accepted. If not, what counter offer should be made.

SECTION - C

ANSWER ANY TWO QUESTIONS:

 $(2 \times 15 = 30)$

18. R Ltd. produces 2 product X & Y. Following information relates to the cost of the products.

-	Product X	Product Y
	Per unit	Per unit
Material (Rs.10 / kg)	40	60
Labour (Rs.2 / hr)	20	12
Variable overhead	10	6
Fixed cost at the current	15	30
capacity		
Selling price	100	120
Units sold	900	2000

Ascertain the product mix (present production output) of either product should be kept as the minimum and the profit when.

- a) labour is in short supply & maximum labour hours available per month 3000 hrs.
- b) material is in short supply and available material is 12000 kgs.
- 19. Prepare a cash budget for the three months ending 31.12.2006 from the following particulars:

a) MONTH	SALES	MATERIALS	WAGES	OVERHEADS
	Rs.	Rs.	Rs.	Rs.
August	20,000	10,200	3,800	1,900
September	21,000	10,000	3,800	2,100
October	23,000	9,800	4,000	2,300
November	25,000	10,000	4,200	2,400
December	30,000	10,800	4,500	2,500

- b) Credit terms all -
- i) Sales -10% as on cash basis, 50% of the credit sales are collected next month and the balance in the following month.
- ii) Creditors for materials 2 months Creditors for wages 1/5 month Creditors for overheads ½ month
- iii) Cash balance on 1.10.2006 is expected to be Rs.8,000.
- iv) A machinery will be installed in August 2006 at a cost of Rs.100,000. The monthly instalment of Rs.5,000 is payable from October onwards.
- v) Advance to be received for sale of vehicle Rs.20,000 in December.
- vi) Dividend at 10% on preference share capital of Rs.3,00,000 will be paid on 1.12.2006.
- vii) Income tax to be paid in December Rs.5,000.
- 20. The standard cost of a chemical mix is

Stonnes of material A at Rs.40 / tonne

12 tonnes of material B at Rs.60 / tone

Standard yield is 90% of input

Actual cost for the period is as under:

10 tonnes of material A at Rs.30 / tonne

20 tonnes of material B at Rs.68 / tonne

Actual yield is 26.5 tonnes

Calculate material variance.

21. Solve the following transportation problem for minimum cost:

	Origin				Requirements
Destination	A	В	C	D	_
1	7	4	3	4	15
2	3	2	7	5	25
3	4	4	3	7	20
4	9	7	5	3	40
Availabilities	12	8	35	25	

