

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.**  
**(For candidates admitted during the academic year 2008-2009 & thereafter)**

**SUBJECT CODE: CM/MC/AM34**  
**B.Com. DEGREE EXAMINATION NOVEMBER 2010**  
**COMMERCE**  
**THIRD SEMESTER**

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

**SECTION – A**

**ANSWER ALL QUESTIONS: ( 10 x 3 = 30 )**

1. Explain gang composition variance
2. What is margin of safety
3. Explain the treatment of work in progress in contract costing.
4. State any 3 application of marginal costing.
5. What is a zero based budget?
6. The sales of a company is Rs.10 lakhs. Its profit volume ratio is 50% and the margin of safety 40%. Calculate the net profit and the breakeven point.
7. The actual sales of X Ltd were January Rs.1 lakhs, February Rs.1.20 lakh and March Rs.1.60 lakh. The estimated sales of April is Rs.2 lakhs. 20% sales are for cash and the balance is on one month credit. However, 30% of the debtors pay only in the second month following sales and 10% of the debtors turn out to be bad. Calculate the estimated cash collections for the month of April.
8. A company produces 300 units of product R, 200 units of product 'S' and 100 units of product J from a single process. The costs up to the point of separation amounted to Rs. 30,000. You are required to apportion the joint cost of production among the products, using the average unit cost method.
9. 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.
10. The cost information for producing 10,000 units of a product are as follows:

	<b>cost/unit Rs.</b>
Material	120
Wages	80
Variable over head	50% of wages
Fixed over head	20

Prepare a flexible budget for the production of 8,000 units.

## SECTION – B

ANSWER ANY FIVE QUESTIONS:

(5 x 8 = 40)

11. The following particulars are taken from the records of a company manufacturing two products, A and B, from a certain material.

	<b>Product A</b> (Rs./unit)	<b>Product B</b> (Rs./unit)
Selling price	2,500	5,000
Material cost (Rs.50/kg)	500	1,250
Direct labour (Rs.30/hr)	750	1,500
Variable overheads	250	500

Comment on the profitability of each product, when:

- Raw material is in short supply
- Labour hours are limited
- If the total available raw material is 20,000 kgs, and the maximum sales potential of each product is 1000 units, calculate the product mix to yield the maximum profit. Ascertain the profit at this level, assuming total fixed overheads are Rs.10 lakhs.

12. Prepare a Sales overhead budget for the month of January, February and March from the estimates given below:

Advertisements Rs. 2,500

Salaries of sales department Rs. 5,000

Expenses of sales department Rs. 7,500

Commission to counter salesmen at 1% of their sales

Travelling salesmen commission at 10% of their sales and expenses 5% of their sales.

The estimated sales for the period are as follows:

	<b>counter sales</b>	<b>travelling salesmen's sales</b>
January	Rs. 80,000	Rs.10,000
February	Rs.1,20,000	Rs.15,000
March	Rs.1,40,000	Rs.20,000

13. a. X Ltd supplies you the following information:

**Standard sales**

10,000 units at Rs.3 per unit

**Actual sales**

6,000 units at Rs.3 per unit

9,000 units at Rs.2 per unit

Calculate the sales volume and price variance.

- b. From the following data, calculate Fixed overheads Cost variance, Volume variance and Expenditure variance.

**Budget:**

Fixed overheads Rs.12,000

Production in units Rs.12,000

**Actual:**

Fixed overheads Rs.13,000

Production in units Rs.10,000

14. In a factory a product passes through two processes A and B, and thereafter to finished stock. From the following data, relating to the month of October 2010, prepare Process accounts.

	<b>Process A</b>	<b>Process B</b>
Units introduced	2000	-
Units transferred to next process	1800	-
Units transferred to finished stock	-	1700
Value of units introduced	Rs.11,000	-
Material	-	Rs.1,000
Labour	Rs. 6,200	Rs.4,000
Overheads	Rs. 2,000	Rs.2,020
Normal loss on input	5%	10%
Sale value of normal loss/unit	2	4

15. In the course of manufacture of main product P, two by products A and B emerge. The joint expenses of manufacture amount to Rs.1,19,550. All the 3 products are processed further, after separation and sold as per details given below:

**Sales :**

P	Rs.90,000
A	Rs.60,000
B	Rs.40,000

**Cost after separation:**

P	Rs.6,000
A	Rs.5,000
B	Rs.4,000

**Profit as a percentage of sales:**

A	25%
B	20%
C	15%

Total fixed selling expenses are 10% of the total cost of sales, which are apportioned to the three products in the ratio of 1:2:2.

- Prepare a statement showing the apportionment of the joint cost to the three products.
  - If the by-product A is not subjected to further processing and is sold at the point of separation for Rs.58,500 without incurring any selling expenses, would you recommend its sale or disposal at this stage?
16. A transport company has been given a route 40 kms long to run a bus. The cost of the bus is Rs.1 lakh. It has been insured at 3% per annum and the annual tax amounts 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.  
 Drivers salary will be Rs.300 per month and the conductor's salary Rs.200 per month, in addition to 10% commission on takings (to be shared equally by them).  
 Cost of stationery Rs.100 per month and Manager's salary Rs.700 per month.  
 Petrol and oil will be Rs.50 per 100 kms. The bus will make 3 round trips per day, carrying on an average 40 passengers on each trip. Bus will run for 25 days in a month. Assuming the company wants a profit of 15% on takings, calculate the bus fare per passenger kilometre.

17. The monthly budget for manufacturing overheads of X Ltd for two levels of activity are as follows:

Capacity	60%	100%
Budgeted production (Units)	600	1000
Wages	1200	2000
Consumable stores	900	1500
Maintenance	1100	1500
Power	1600	2000
Depreciation	4000	4000
Insurance	1000	1000

Prepare a budget for 80% capacity.

### SECTION – C

**ANSWER ANY TWO QUESTIONS:**

**(2 x 15 = 30)**

18. 20000 units were introduced in a process at a cost of Rs.2 lakhs. Other expenses incurred were

Material Rs.1,04,000; Labour Rs.1,71,000; Factory overheads Rs.68,400. Normal loss is expected to be 10% of input.

16,000 units were completed and transferred to the next process.

2500 units were scrapped when they were completely processed.

1500 units remained as closing work in progress, the degree of completion being:

Material 75%; Labour and overheads 40%.

Scrap was sold at Rs.11 per unit.

Prepare a statement showing the Process Account, Abnormal Loss Account, Equivalent production, Cost per equivalent unit and a Apportionment of cost.

19. R Ltd undertook a contract for Rs. 2,50,000. The following details related to the contract, during the year 2009:

	(Rs.)
Material sent to site	85,349
Labour	74,375
Plant installed at site	15,000
Direct expenses	3,167
Establishment charges	4,126
Material returned to stores	549
Work certified	1,95,000
Work uncertified	4,500
Material at site on 31/12/2009	1,883
Wages accrued on 31/12/2009	2,400
Direct expenses accrued on 31/12/2009	240
Value of Plant on 31/12/2009	11,000
Cash received from Contractee	1,80,000

Prepare the Contract Account and show the entries in the Balance Sheet as on 31/12/2009.

20. The standard cost of a chemical mixture AB is :

40% material A at Rs.400 per kg

60% material B at Rs.600 per kg

A standard loss of 10% is anticipated in production.

The following particulars are available for the month of December 2009:

180 kgs of material A has been used at Rs.360 per kg

220 kgs of material B has been used at Rs.680 per kg

The actual production for the month is 369 kgs.

Calculate material variances.

21. The following data are obtained from the records of a factory:

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

Calculate :

- a) Breakeven point in units and value
- b) Sales required in units to earn a profit of 20% on sales
- c) The number of units to be sold to obtain the present profit, if the selling price is reduced by 20%
- d) The selling price to be fixed to bring down the break-even points to 500 units.

