

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

SUBJECT CODE: 11CM/MC/AC34

B.Com. DEGREE EXAMINATION NOVEMBER 2012
COMMERCE
THIRD SEMESTER

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

SECTION – A

ANSWER ALL QUESTIONS: (10 x 3 = 30)

1. Distinguish between 'Joint product' and 'By-product'.
2. What is idle time variance? How is it calculated?
3. Mention 3 features of marginal costing.
4. Explain 'Work certified' and 'Retention money' in the context of Contract Account.
5. What are inter process profits? Why should such profits be provided for?
6. In Process A 5000 units are introduced at a total cost of Rs.97,000. Normal loss is estimated at 3% of input. An additional 500 units were lost due to carelessness of the worker. Prepare Process A account.
7. A truck starts with a load of 10 tonnes of goods from Station X. It unloads 4 tonnes at station Y and the rest of the goods at Station Z. From Z the vehicle returns to X with a load of 8 tons. The distance between X and Y is 40 kms, between Y and Z 60 kms and between Z and X 80 kms. Calculate the total tonne kilometres and the cost per tonne kilometre if the total cost for the entire trip is Rs.7000.
8. Following expenses were incurred by a contractor on a contract :
Material cost Rs.1,50,000 , Labour cost Rs.50,000 and overhead Rs.5,000.
Calculate the value of work uncertified, when the material cost is 10% of the material cost incurred , labour cost 15% of wages paid and overheads as a percentage on direct labour cost.
9. From the following calculate fixed overheads, cost, expenditure and volume variance:
Budgeted fixed overheads Rs.100000
Actual fixed overheads Rs.120000
Budgeted production 50000 units
Actual production 54000 units
10. From the following data calculate sales to earn a profit of Rs.5000 and break even point.
Period I - Sales Rs.1,00,000; Loss Rs.500
Period II - Sales Rs.14,000 ; Profit Rs.1,500

SECTION – B

ANSWER ANY FIVE QUESTIONS:

(5 x 8 = 40)

11. 8000 units of P and 6000 units of Q are obtained in a crude form from a joint process after incurring a joint cost of Rs.60800. These products require further processing at a cost of Rs.5 per unit for P and Rs.4 per unit for Q. Selling expenses incurred are to be apportioned in sales ratio. Assuming a net profit of 25% on cost, their sale prices are fixed at Rs.13.75 and Rs.11 per unit respectively. Calculate the joint cost per unit of P and Q.

12. The following production/sales mix is capable of achievement in a factory :

- 2000 units of product A and 2000 units of Product C
- 4000 units of Product B
- 1,000 units of Product A, 2000 units of Product B and 1600 units of Product C

Cost per unit is as follows :

	A	B	C
Direct Material	Rs.20	Rs.16	Rs.40
Direct wages	Rs.8	Rs.10	Rs.20

Fixed cost is Rs.20,000 and variable overheads per unit of A, B and C are Rs.2, Rs.4 and Rs.8 respectively. Selling prices of A, B and C are Rs.36, Rs.40 and Rs.100 per unit. Determine the marginal contribution per unit of A, B and C and the profits resulting from the product mixes.

13. Dr. Mohan hires a building to run a nursing home. The building has 4000 sq. metres of area, consisting of 20 rooms. The monthly rent is Rs.750 per 1000 sq. meters. Lighting and heating expenses are Rs.6000 per month. The staff consists of 2 doctors at Rs.15000 per month each, 6 nurses at Rs.5000 per month each, 4 ward boys at Rs.3000 per month each. It is expected that on an average 75% of the rooms will always remain occupied during all the 30 days in the month. Calculate the room rent per day if Dr. Mohan wants a profit of 40% on his collections.

14. A product passed through 2 processes before it is transferred to finished stock. The following information is obtained for the month of December.

	Process1 (Rs.)	Process2 (Rs.)	Finished stock (Rs.)
Opening stock	10,000	12,000	20,000
Direct material	20,000	21,000	-
Direct wages	15,000	15,000	-
Production overheads	14,000	6,000	-
Closing stock	5,000	6,000	8,500
Profit %age on transfer price:			
To next process	25%	20%	-
Inter process profits in opening stock	-	2,000	7,000

Stocks in processes are valued at prime cost and finished stock is valued at the price at which it is received from Process 2.

Sales for the period was Rs.2,00,000.

Prepare Process Accounts showing the profit at each stage.

15. Ramesh runs a tourist car on a 20 km long route (one way). The car costs Rs.15,00,000 and has a life of 10 years and an estimated scrap value of Rs.5,00,000. Other expenses are
Insurance Rs.45,000 per annum; Road tax Rs.9,000 per annum; Garage rent Rs.5,000 per month, Repairs Rs.40,000 per annum, Other expense Rs.2,000 per month. Driver's wages Rs.3,000 per month plus 10% of takings as commission; Petrol costs Rs.1000 per 100 kms.
The car makes 4 round trips per day and run for 25 days in a month.
Ramesh wants a profit of 15% on takings. How much should he charge per kilometre?
16. Calculate labor variances from the following data:
Budgeted labor for completing Job X:
8 men at Rs.10 per hour for 20 hours
12 women at Rs.8 per hour for 20 hours
Actual labor for completing Job X:
12 men at Rs.11 per hour for 20 hours
13 women at Rs.7 per hour for 20 hours
Calculate labor cost, efficiency, rate and mix variance.
17. A product passes through 2 processes 1 and 2, details of which are given:
- | | <u>Process 1</u>
(Rs.) | <u>Process2</u>
(Rs.) |
|-----------------------------|---------------------------|--------------------------|
| Sundry material | 10,000 | 20,000 |
| Labour | 6,000 | 4,000 |
| Overheads | 10,000 | 10,000 |
| Output (units) | 9,750 | 9,400 |
| Normal loss (%age on input) | 2% | 6% |
| Sale value of loss per unit | 0.70 | 2.0 |
- 10,000 units costing Rs. 3 per unit were introduced in Process 1.
Prepare Process account.

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2 x 15 = 30)

18. W Ltd commenced a contract for a contract price of Rs.20,00,000 on April 1, 2011 and provide you the following data for the period ending December 31, 2011.
Material used Rs.2,15,600
Labor charges Rs.5,65,600
Foreman's salary Rs.81,300
Other expenses Rs.1,37,500
A supervisor who is paid Rs.8,000 per month has devoted half his time on this contract. A machine costing Rs.2,60,000 has been on the site for 146 days. Its working life is 7 years and final scrap value Rs.15,000.
On 31st Dec. the architect issued certificate covering 50% of the contract price . Contractor was paid 75% of the works certified. The value of work uncertified was Rs.1,75,000.
Show the contract account for the year ending December 31, 2011 and the entries in the Balance Sheet as on December 31, 2011.

19. The following data are available in respect of Process 1 for a particular period.

Opening WIP 1000 units at Rs.5000
 Input of raw material 10000 units of Rs.30,000
 Direct wages Rs.16,740
 Production overheads Rs.8,370
 Units scrapped 1200
 Closing work in progress 1500 units
 Transferred to Process 2 .. 8300 units
 Normal loss 10% of total input
 Units scrapped, realized Rs.3 per unit

<u>Degree of completion</u>	<u>Material</u>	<u>Labor and overheads</u>
Opening WIP	100%	60%
Scrapped items	100%	70%
Closing WIP	100%	40%

Prepare a statement of equivalent production, cost per equivalent unit for each element, apportionment of cost and process 1 account.

20. The standard material cost of Product X shows the following:

Material A 40 kgs at Rs.7.50 per kg
 Material B 10 kgs at Rs.5 per kg
 Material C 50 kgs at Rs.2 per kg

The standard material loss is 10% of input.

The actual quantity used were as follows:

Material A 240 kgs at Rs.8 per kg
 Material B 40 kgs at Rs.5.20 per kg
 Material C 220 kgs at Rs.2.10 per kg

The actual production was 420 kgs.

Calculate Material variances.

21. a) A company produces 3 products, A, B and C, which have the following details:

	<u>A</u>	<u>B</u>	<u>C</u>
Material cost at Rs.5 per kg	40	25	30
Labour cost	20	15	17
Variable overheads	10	5	9
Selling price per unit	100	70	80
Market demand (units)	3000	4000	2000

The company must produce 1000 units of A. The maximum quantity of material available is 37,000 kgs.

What is the product mix to be produced that will maximise profit? If the total fixed expenses are Rs.40,000, what will be the profit for this production.

b) A machine can manufacture 10,000 units of a Part X per month at the cost of Rs.21 per unit, of which Rs.18 is variable. X can be bought in the market at Rs.19 per unit. Should the company produce or buy the part?

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