STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086. (For candidates admitted during the academic year 2011-2012 and thereafter)

## SUBJECT CODE: 11CM/MC/AC34

## B.Com. DEGREE EXAMINATION NOVEMBER 2014 <br> COMMERCE <br> THIRD SEMESTER

| COURSE | $:$ | MAJOR CORE |  |
| :--- | :--- | :--- | :--- |
| PAPER | $:$ | ADVANCED COST ACCOUNTING |  |
| TIME | MAX. MARKS: 100 |  |  |
| ANSWER ALL QUESTIONS. | SECTION A |  |  |
| (10 x 3 = $\mathbf{3 0}$ marks) |  |  |  |

1. What is meant by contract costing? State any two features of contract costing.
2. What is the classification of cost under Transport Costing?
3. Define standard costing. Write any 2 advantages of standard costing.
4. Product A requires 10 kg of materials at the rate of Rs. $4 / \mathrm{kg}$. The actual consumption of material for the manufacturing of product A came to 12 kg of material at the rate of Rs 4.50/kg.
Calculate: i) Material cost variance, ii) Material usage variance iii) Material price variance.
5. From the information given below prepare contract account.

Particulars
Material bought from market
Materials issued from stores
Materials returned to stores
Wages
Direct expenses
Work on cost $25 \%$ of direct wages
Office on cost $10 \%$ of prime cost Contract price

Amt (Rs)
1,500 500240240

2440
294
-
-
6000
6. Calculate the total "room - days " from the following data :

1. no. of room: 50 double and 120 single
2. weightage based on value : double room 2 and single room 1
3. room occupied: busy season : double room $90 \%$ and single room $95 \%$
slack season : double room 60\% and single room50\%
4. slack season : 250 days and busy season 130 days
5. Write about abnormal loss and abnormal gain.
6. The cost records show the following cost of producing 600 units of a product in process X:

| Particulars | Amt .Rs |
| :--- | ---: |
| Materials | 12,000 |
| Labour | 4,500 |
| overheads | 1,500 |

The normal wastage is $10 \%$ of the units and this wastage can be sold in the market at Rs 15 per unit. The actual production was 570 units. Prepare process `X` account.
9. The ratio of variable cost to sales is $70 \%$. The break-even point occurs at $60 \%$ of the capacity sales. Find the capacity sales when fixed costs are Rs.90, 000. Also compute profit at $75 \%$ of the capacity sales.
10. What is marginal costing and state its application?

## SECTION B

## ANSWER ANY FIVE QUESTIONS.

11. Contractors Ltd. undertook a special contract for a total value of Rs. 12 lakhs. You are required to prepare a contract account for the year ending 31.03.2004 from the following:

| Particulars | Amt (Rs) |
| :--- | :---: |
| wages | $3,00,000$ |
| Materials sent to site | $1,50,000$ |
| Materials lying at site on 31.03.2004 | 20,000 |
| Special plant | $1,00,000$ |
| Overheads | 60,000 |
| Work certified | $8,00,000$ |

Depreciation at $10 \%$ to be provided on plant. Cash received is $80 \%$ of work certified. $5 \%$ of the value of the materials used and $6 \%$ of wages may be taken to have been incurred for the proportion of work completed but not yet certified. Overheads are charged as a percentage of direct wages.
12. Laxmi travels a transport company is running a fleet of 6 buses between two towns 75 kms . apart. The seating capacity of each bus is 40 passengers. The following particulars are available for the month of April 2007.

| Particulars | Amt (Rs) |
| :--- | ---: |
| Wages of drivers, conductors, etc | 3,600 |
| Salaries of office and supervisory staff | 1,500 |
| Diesel, oil, etc | 10,320 |
| Repairs and maintenance | 1,200 |
| Taxes and insurance | 2,400 |
| Depreciation | 3,900 |
| Interest and other charges | 3,000 |

The actual passengers carried were $80 \%$ of the capacity. All the buses run all the days in the month. Each bus made one round trip per day. Find out the cost per passenger kilometer.
13. Find out different labour variances from the following particulars:

STANDARD
Output $=1,000$ units
Rate of payment= Rs 6 per unit
Time taken $=50$ hours

ACTUAL
Output = 1,200 units
Wages paid with bonus = Rs 8,000
Time taken $=40$ hours
14. A factory produces three products $\mathrm{X}, \mathrm{Y}$ and Z of equal value from the same manufacturing process. The joint cost before split-off point is Rs 25,200 . Further processing costs are as follows:

| Particulars | Product <br> X (Rs) | Product <br> Y(Rs) | Product <br> Z(Rs) |
| :--- | ---: | ---: | ---: |
| Materials | 1,400 | 1,300 | 580 |
| Labour | 420 | 400 | 380 |
| Overheads | 180 | 100 | 240 |
| Total sales value | 20,000 | 14,000 | 12,000 |
| Estimated profit on sales | $20 \%$ | $30 \%$ | $40 \%$ |

Show the apportionment of joint cost on the basis of net realizable value.
15. The following costs and sales of a manufacturing co. for the first half and second half of 1998-1999 are given:

## Particulars

First Half
(Rs)
24,00,000
21,80,000
Second Half
(Rs)
30,00,000
Sales
Total cost
Determine :
1.contribution/sales ratio of the firm , 2. annual fixed cost, 3 . break- even point $\&$ 4. margin of safety as percentage of sales
16. Prakash automobiles distribute its goods to a regional dealer using a single lorry. The dealers premises are 40 km away by road. The lorry has a capacity of 10 tonnes and makes the journey twice a day fully loaded on the outward journeys and empty on return journey. The following information is available for a four weekly period during the year 1990.

PARTICULARS
Petrol consumption
Petrol cost
Oil
Drivers wages
Repairs
Garage rent
Cost of lorry (excluding tyres)
Life of lorry
Insurance
Cost of tyres
Life of tyres
Estimated sale value of lorry at the end of its life
Vehicles license cost
Other overhead cost

AMOUNT
8 kilometers
Rs. 13 per litre
Rs. 100 per week
Rs. 400 per week
Rs. 100 per week
Rs 150 per week
Rs 4,50,000
80,000 kilometers
Rs. 6,500 p.a
Rs.6,250
25,000 kilometers
Rs 50,000
Rs 1,300 p.a
Rs 41,600 p.a

The lorry operates on a 5 day week.

1. Prepare a statement to show the total cost of operating the vehicles for the four weekly period into running costs and fixed cost.
2. Calculate the vehicle cost per tone- kilometer.
3. An expenditure of Rs $1,94,000$ has been incurred on a contract at the end of $31^{\text {st }}$ march 1997. The value of work certified is Rs 2, 20,000. The cost of work done but not yet certified is Rs 6,000 . It is estimated that the contract will be completed by $30^{\text {th }}$ June 1997 and an additional expenditure of Rs 40,000 will have to be incurred to complete the contract.
The total estimated expenditure on the contract is to include a provision of $2.5 \%$ for contingencies. The contract price is Rs.2, 80,000 and Rs.2, 00,000 has been realized in cash up to $31^{\text {st }}$ March 1997. Calculate the proportion of profit to be taken to the profit and loss a/c as on 31.03.1997, after preparing the contract account in the contract ledger.

## SECTION C

## ANSWER ANY TWO QUESTIONS.

(2 x $15=30$ marks)
18. The following details are given in respect of a manufacturing unit for the month of april 1999.

| (i) | Opening work-in-progress | 5000 units |
| :--- | :--- | :--- |
|  | Materials (100\% complete) | Rs.18, 750 |
|  | Labour(60\% complete) | Rs. 7,500 |
|  | Overheads (60\% complete) | Rs. 3, 750 |
| (ii) | Units introduced into the process | 17,500 Units |
| (iii) | 17,500 units are transferred to the next process. |  |
| (iv) | Process costs for the period are |  |
|  | Materials | Rs. 2, 50,000 |
|  | Labour | Rs. 1, 95,000 |
|  | Overheads | Rs. 97,500 |
| (v) | Closing work-in-progress | 5,000 units |
|  | Materials | $100 \%$ Complete |
|  | Labour | $50 \%$ Complete |
|  | Overhead | $50 \%$ Complete |
| Prepare statement of equivalent production, statement of cost, statement of |  |  |
| evaluation and process account by following average cost method. |  |  |

19. The following data relate to a manufacturing co.:

Plant capacity: 4, 00,000 units per annum. Present utilization: 40\%
Actuals for the year 1992 were:

## Particulars

Selling price
Material cost
Variable manufacturing costs
Fixed costs

Amt
Rs. 50 per unit
Rs. 20 per unit
Rs. 15 per unit
Rs. 27,00,000

In order to improve capacity utilization, the following proposals are considered:

1. Reduce selling price by $10 \%$,
2. Spend additionally Rs $3,00,000$ on sales promotion

How many units should be sold to earn a profit of Rs $5,00,000$ per year?
20. S.V Ltd., manufactures a product, the standard mix of which is:

Material A $\quad=\quad 60 \%$ at Rs. 20 per kg
Material B $\quad=\quad 40 \%$ at Rs. 10 per kg
Normal loss in production is $20 \%$ of output. Due to shortage of material A, the standard mix was changed. Actual results for March 1989 were:

| Material A | $=$ | 105 kg at Rs. 20 per kg |
| :--- | :--- | :--- |
| Material B | $=$ | $\underline{95 \mathrm{~kg} \text { at Rs. } 9 \text { per kg }}$ |
| Input |  | 200 kg |
| Less: Loss |  | $\underline{035 \mathrm{~kg}}$ |
|  |  | 165 kg |

Calculate: (i) Material price variance (ii) Material usage variance (iii) Material mix variance and (iv) Material yield variance.
21. The following trial balance was extracted on $31^{\text {st }}$ December 2001 from the books of Swastik company Ltd contractors:

## PARTICULARS

Share capital: shares of Rs. 10 each Profit and loss a/c on $1^{\text {st }}$ January 2001
Provision for depreciation for machinery
Cash received on account: contract 7
Creditors
Land and buildings (cost)
Machinery (cost)
Bank
Contract 7:
Material
Direct labour
Expenses
Machinery at site (cost)
Total

AMOUNT AMOUNT
(Rs)
(Rs)
3,51,800
25,000
63,000
12,80,000
81,200
74,000
52,000
45,000
6,00,000
8,30,000
40,000
1,60,000
18,01,000 18,01,000

Contract 7 was started on $1^{\text {st }}$ Jan 2001. The contract price is Rs. $24,00,000$ and the customer has so far paid Rs. 12, 80,000 , being $80 \%$ of work certified. The cost of work done since certification is estimated as Rs.16, 000.

On $31^{\text {st }}$ December 2001 after the above trial balance was extracted, machinery costing
Rs. 32,000 was returned to stores, and materials at site were valued at Rs.27, 000.
Provision is to be made for direct labour due Rs.6, 000 and for depreciation of all machinery at $12.5 \%$ on cost. Prepare (a) contract a/c, (b) the balance sheet of Swastik Co. Ltd. as on $31^{\text {st }}$ December.

