# 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 2015 <br> COMMERCE <br> THIRD SEMESTER

| COURSE | $:$ | MAJOR CORE |
| :--- | :--- | :--- |
| PAPER | $:$ | ADVANCED COST ACCOUNTING |
| TIME | $:$ | 3 HOURS |

## SECTION A

ANSWER ALL QUESTIONS.
MAX. MARKS: 100
( $10 \times 3=30$ marks $)$

1. What is Contract Costing? State any 2 features of Contract costing.
2. How are costs classified in Transport Costing?
3. Define Standard Cost \& Standard Costing.
4. What is meant by key factor?
5. What is abnormal gain? How is treated in process cost accounting?
6. Following expenses were incurred on a contract during 2010:

Materials Rs. 90,000, Wages Rs. 80,000, other expenses Rs. 5,000. Rs. 2,00,000 was received from the contractee, being $80 \%$ of work certified. Work done but not certified was Rs.5, 000. Determine the profit to be credited to profit \& loss a/c when
(a) Contract price is Rs. 5,50,000 (b) Contract price is Rs. 12,00,000.
7. Data relating to a job are given as:

Standard rate of wages per hour Rs.10, Standard hours 300, Actual rate of wages per hour Rs.12, Actual hours 200. Calculate Labour Cost Variance, Labour rate variance \& Labour efficiency variance.
8. A transport company maintains a fleet of lorries for carrying goods from Delhi to Agra, 100 kms off. Each lorry which operates 25 days on an average in a month starts every day from Delhi with a load of 4 tonnes \& returns Agra with a load of 2 tonnes. Calculate the total commercial tonne $-\mathrm{kms} \quad \&$ cost per commercial tonne -km when the total monthly charges for a lorry are Rs 27,000. What rate should the company charge if it plans to earn a gross profit of $20 \%$ on the freitage?
9. Calculate the break -even point \& turnover required to earn a profit of Rs. 36,000. Fixed overheads Rs. 1,80,000, Selling Price Rs.20, Variable cost per unit Rs 2. If the company is earning a profit of Rs. 36,000 express the margin of safety available to it.
10. Following is the cost of producing 600 units of a product in Process X: Materials Rs.12,000, Labour Rs 4,500 \& overheads Rs 1,500. The normal wastage is $10 \%$ of the units \& this wastage can be sold in the market at Rs. 15 per unit. The actual output was 570 units. Prepare Abnormal Gain a/c \& Normal Loss a/c.

## SECTION B

ANSWER ANY FIVE QUESTIONS.
( $5 \times 8=40$ marks )
11. S Construction company undertook a contract for erecting a sewerage treatment plant for Municipality for a total value of Rs 24 lakhs on 1.1.2009. Job would be completed by 31.7.2010. Prepare Contract A/c for the year ending 31.12.2009.

| Materials (Rs.) | $3,00,000$ | Materials at site <br> on 3.12.2009 | 40,000 |
| :--- | ---: | :--- | ---: |
| Wages (Rs.) | $6,00,000$ | Work certified | $16,00,000$ |
| Overhead charges (Rs.) | $1,20,000$ | Special plant | $2,00,000$ |

Cash received is $80 \%$ of work certified. Depreciate Plant by $10 \%$.
$8 \%$ of the value of material issued \& $7 \%$ of wages may be taken to have been incurred for the portion of the work completed, but not yet certified. Overheads are charged as a $\%$ of direct wages. Prepare the Contract A/c.
12. The product of a manufacturing concern passes through 2 processes $A \& B \&$ then to finished stock. In each process $5 \%$ of the total weight is lost \& $10 \%$ is scrap which from processes A \& B realizes Rs. 80 /tonne \& Rs. 200/tonne respectively. Following information is given:

|  | Process A | Process B |
| :--- | ---: | ---: |
| Materials (tonnes) | 1,000 | 70 |
| Cost of materials (Rs/ tone) | 125 | 200 |
| Wages (Rs) | 28,000 | 10,000 |
| Manufacturing expenses (Rs) | 8,000 | 5,250 |
| Output (tonnes) | 830 | 780 |

Prepare process cost accounts showing cost per tonne of each process. There was no stock or WIP in any process.
13. Following information is available from the cost records of United Automobiles Ltd manufacturing spare parts.
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| Direct materials: X <br> Y | $\begin{aligned} & \hline \text { Rs } 8 \\ & \text { Rs } 6 \\ & \hline \end{aligned}$ | Variable overheads | $150 \%$ of wages |
| :---: | :---: | :---: | :---: |
| Direct wages: <br> X <br> Y | 24 hours @ 25paise /hour <br> 16 hours @ 25paise /hour | Fixed overheads | Rs 750 |
| Selling price: <br> X <br> Y | $\begin{aligned} & \text { Rs } 25 \\ & \text { Rs } 20 \\ & \hline \end{aligned}$ |  |  |

The directors are desirous of adopting any one of the following sales mixes for the next period.
a) 250 units of $X \& 250$ units of $Y$
b) 400 units of Y only
c) 400 units of X \& 100 units of Y
d) 150 units of $X \& 350$ units of $Y$.

State which of the sales mixes would you recommend to the management.
14. From the following data calculate all possible overhead variances.

|  | Budgeted | Actual |
| :--- | ---: | ---: |
| Output | 15,000 units | 16,000 units |
| No. of working days | 25 | 27 |
| Fixed overheads | Rs. 30,000 | Rs. 30,500 |
| Variable overheads | Rs. 45,000 | Rs. 47,000 |

15. John owns a fleet of trucks. His records for 2010 contain the following details. Compute cost per effective running km.

| No. of trucks | 10 | Scrap value at the end <br> of life | Rs 20,000 |
| :--- | :--- | :--- | :--- |
| Life of each truck in kms | $2,00,000$ | Manager's salary p.m. | Rs 2,000 |
| Monthly distance run by a <br> truck in kms | 5,000 | Accountant's <br> salary p.m. | Rs 1,500 |
| Average empty running <br> p.m. | $20 \%$ | Driver's salary per <br> truck per month | Rs 700 |
| Fuel usage | 01 litre for every 20 kms | Cleaner's salary per <br> truck p.m. | Rs 400 |
| Cost of truck | Rs 1,20,000 | Salary of 3 mechanics <br> common for all trucks <br> each p.m. | Rs 500 |
| Garage expenses for 10 <br> trucks p.a. | Rs 12,000 | Road tax per truck p.a. | Rs 1,200 |
| Insurance | at $2.4 \%$ on cost of truck <br> p.a. | Price of petrol per litre | Rs 30 |
| Lubricants, tyres \& repairs <br> per km | Rs 0.40 |  |  |

16. From the following data, calculate labour mix variance.

## Standard Labour:

100 skilled workers @ Rs 300 per month
200 semi-skilled workers @ Rs 200 per month
Actual Labour:
110 skilled workers @ Rs 350 per month
340 semi-skilled workers @ Rs 225 per month.
Due to shortage of skilled workers, it was decided to reduce the number of skilled workers by $10 \%$ \& increase that of semi skilled workers @ $5 \%$.
17. B Ltd manufactures product A which yields 2 by products $\mathrm{B} \& \mathrm{C}$. The actual joint expenses of manufacture for a period were Rs. 8,000.It was estimated that the profits on each product as a percentage of sales would be $30 \%, 25 \% \& 15 \%$ respectively. Subsequent expenses were:

|  | A <br> Rs. | B <br> Rs. | C <br> Rs. |
| :--- | ---: | ---: | ---: |
| Materials | 100 | 75 | 25 |
| Direct wages | 200 | 125 | 50 |
| Overheads | 150 | 125 | 75 |
| Total | 450 | 325 | 150 |
| sales | 6,000 | 4,000 | 2,500 |

Prepare a statement showing the apportionment of the joint expenses of manufacture over the products. Presume that selling expenses are apportioned over the products as a percentage to sales.

## SECTION C

ANSWER ANY TWO QUESTIONS.
( $2 \times 15=30$ marks )
18. The standard cost of a chemical mixture is as under:

8 tons of material A at Rs. 40 per ton.
12 tons of material B at Rs. 60 per ton.
Standard yield is $90 \%$ of input.
Actual cost for a period is as under:
10 tons of material A at Rs 30 per ton
20 tons of material B at Rs 68 per ton.
Actual yield is 26.5 tons.
Compute all material variances.
19. The following details relate to an intermediary process in a factory:

|  | \% of degree of <br> completion | No. of <br> units | Cost (Rs) |
| :--- | ---: | :--- | ---: |
| Opening work in progress | $50 \%$ | 300 | 12,300 |
| Materials | Ler |  |  |
| Labour | $80 \%$ |  |  |
| Overheads | $100 \%$ | 3,800 | $1,36,800$ |
| Transfer from previous |  |  | 7,900 |
| process |  |  | 37,400 |
| Process material added |  |  | 14,960 |
| Direct wages | $100 \%$ | 3,500 |  |
| Overheads |  |  |  |
| Transfer to next process | $100 \%$ | 600 |  |
| (finished) | $80 \%$ |  |  |
| Closing work in progress | $80 \%$ |  |  |
| Materials |  |  |  |
| Labour |  |  |  |
| Overheads |  |  |  |

Prepare i) Process cost accounts for the intermediary process
ii) statement of equivalent units on FIFO basis
iii) statement of distribution of cost on the basis of equivalent units.
20. A company annually manufactures 10,000 units of a product at a cost of Rs. 4 per unit \& there is home market for consuming the entire volume of production at the sale price of Rs. 4.25 per unit. In the year 2014 there is a fall in the demand for home market which can consume 10,000 units only at the sale price of Rs 3.72 per unit. The analysis of the cost per 10,000 units is as follows:
Materials Rs 15,000 , Wages Rs 11,000 , Fixed Overheads Rs 8,000 , Variable overheads Rs 6,000 . The foreign market is explored \& it is found that that this market can consume 20,000 units of the product if offered at a sale price of Rs. 3.55 per unit. It is also discovered that for additional 10,000 units of the product (over initial 10,000 units) fixed overheads will increase by $10 \%$. Is it worthwhile to try to capture the foreign market?
21. A company undertook a contract for construction of a large building complex. The construction work commenced on $1^{\text {st }}$ April, $2000 \&$ the foll: data are available for the year ended $31^{\text {st }}$ March 2001.

| Rs'000s |  |  | Rs '000s |
| :--- | ---: | :--- | ---: |
| Contract price | 35,000 | Plant hire charges | 1,750 |
| Work certified | 20,000 | Wages related to <br> contract | 500 |
| Cash received | 15,000 | Site office costs | 678 |
| Materials issued to site | 7,500 | Head office <br> expenses <br> apportioned | 375 |
| Planning \& estimating <br> costs | 1,000 | Site expenses <br> incurred | 902 |
| Direct wages paid | 4,000 | Work not certified | 149 |
| Materials returned <br> from site | 250 |  |  |

The contractors own a plant which originally costs Rs. 20 lakhs has been continuously in use in this contract throughout the year. The residual value of the plant after 5 years of life is expected to be Rs. 5 lakhs. Straight line method of depreciation is in use. As on 31.3.2001 the direct wages due \& payable amounted to Rs 2,70,000 \& the materials at site were estimated at Rs 2,00,000.
Prepare
i) Contract $\mathrm{A} / \mathrm{c}$ for year ended 31.3.2001 \& ascertain the profit to be taken to P/L a/c ii) Show the relevant entries in the Balance Sheet.

