# STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086. (For candidates admitted during the academic year 2015-16 and thereafter) SUBJECT CODE: 15CM/MC/AM45 

## B.Com. (A \& F) DEGREE EXAMINATION APRIL 2019 ACCOUNTING AND FINANCE <br> FOURTH SEMESTER <br> COURSE : MAJOR - CORE <br> PAPER : ADVANCED COST AND MANAGEMENT ACCOUNTING <br> MAX. MARKS: 100

 TIME : 3 HOURS
## Section A

## Answer ALL the questions.

1. What is Abnormal gain?
2. What is escalation clause?
3. Enlist any two significance of flexible budget.
4. Mention any two features of Marginal costing.
5. State any two limitations of standard costing.
6. 10,000 units are introduced into a process at Rs. 10 per unit. All other expenses are Rs. 8 per unit. Normal loss in the process is $10 \%$. Scrap value is Nil. If output is 9,000 units, ascertain the cost per unit in the process.
7. Find out the marginal cost from the following information:

Direct Material : Rs. 10,000, Direct Wages: Rs. 12,000, Direct expenses: Rs.13,000, Variable overheads: Rs.8,000 and Fixed Overheads: Rs.15,000.
8. A Cinema Theatre in Chennai has seating capacity of 2000. It runs daily 4 shows on all 30 days of a month. On average $80 \%$ of the seats are occupied throughout the month. Ascertain the number of man- shows during the month.
9. Compute the quantity of raw material to be purchased from the following information: Opening stock of Raw material : $10,000 \mathrm{kgs}$, Material expected to be consumed : $20,000 \mathrm{kgs}$ and Closing stock of Material required : 5,000 kgs.
10. Standard rate per Labour hour in a factory was Rs.20. However during a month payment was made for 26,000 Labour hours at Rs. 22 each. Calculate Labour rate variance.

## Section B

Answer Any FIVE questions.
11. From the following data provided by Kanna Ltd, for the month of August 2004. Calculate (a) Total overhead cost variance (b) Fixed overhead cost variance and (c) Variable overhead variance.

| Particulars | Budget | Actual |
| :--- | :--- | :--- |
| Output in units | 30,000 | 32,500 |
| Fixed overheads (Rs.) | 45,000 | 50,000 |
| Variable overheads(Rs.) | 60,000 | 68,000 |

12. Assume that the cost structure and selling price remain the same in periods I and II, find out:
(a) Profit Volume ratio
(b) Fixed cost
(c) Break even point for sales
(d) Profit when sales are Rs. 1,00,000
(e) Sales required to earn a profit of Rs. 20,000
(f) Margin of safety at a profit of Rs. 15,000 and
(g) Variable cost in period II.

| Period | Sales (Rs.) | Profit (Rs.) |
| :--- | :--- | :--- |
| I | $1,20,000$ | 9,000 |
| II | $1,40,000$ | 13,000 |

13. Prepare a production budget showing the production for each month and summarized production cost budget for the six months period ending $31^{\text {st }}$ December 2010 form the following data of Product Q
(a) The units to be sold for different months are as follows:

| Months | Units | Months | Units |  |
| :--- | :--- | :--- | :--- | :---: |
| July 2010 | 1,100 | August 2010 | 1,100 |  |
| September 2010 | 1,700 | October 2010 | 1,900 |  |
| November 2010 | 2,500 | December 2010 | 2,300 |  |
| January 2010 | 2,000 |  |  |  |

(b) There will be no work- in- progress at the end of any month.
(c) Finished units equal to half the sales for the next month will be in stock at the end of each month (including June 2010).
(d) Budgeted production and production cost for the year ending $31^{\text {st }}$ December 2010 are

| Production (units) | 22,000 |
| :--- | :--- |
| Direct materials (per unit) | Rs. 4 |
| Direct wages (per unit) | Rs. 10 |

Total factory overhead apportioned to produce Rs. 88,000 .
14. The following are the details of costing records of Samurai Industries Ltd. in respect of Job

No. 78:
Material consumed Rs.6,000
Wages :
Cutting department 20 hours at Rs. 40 per hour
Shearing department 10 hours at Rs. 40 per hour
Boring department 5 hours at Rs. 60 per hour
Variable overheads for the respective departments are estimated as follows:
Cutting department Rs. 40,000 for 2,000 direct labour hours.
Shearing department Rs.20,000 for 2,500 Direct labour hours.
Boring department Rs. 10,000 for 400 Direct labour hours.
Fixed overheads are estimated at Rs. $1,00,000$ for 20,000 normal working hours.
You are required to ascertain the cost of Job No. 78 and calculate the price to be charged so as to give a profit of $20 \%$ on cost.
15. A factory producing article Y also produces a by- product Z which is further processed into finished product. The joint cost of manufacture is given below:

| Particulars | Rs. |
| :--- | ---: |
| Material | 5,000 |
| Labour | 3,000 |
| Overheads | 2,000 |
| Total | 10,000 |

Subsequent costs are given below:

| Particulars | Y (Rs.) | Z (Rs.) |
| :--- | ---: | ---: |
| Materials | 3,000 | 1,500 |
| Labour | 1,400 | 1,000 |
| Overheads | 600 | 500 |
| Total | 5,000 | 3,000 |

## Selling price are Y- Rs. 16,000, Z- Rs.8,000

Estimated profits on selling prices are $25 \%$ for P and $20 \%$ for Z . Assume that selling and distribution expenses are in proportion of sales prices.
Show how you would apportion joint costs of manufacture and prepare a statement showing cost of production of Y and Z .
16. Contractors Ltd. undertook a special contract for a total value of Rs. 12 lakhs. It was expected that the contract would be completed by $31^{\text {st }}$ March 2011. You are required to prepare contract account for the year ending $31^{\text {st }}$ January 2011 from the following:

| Particulars | Rs. |
| :--- | ---: |
| Wages | $3,00,000$ |
| Materials sent to site | $1,50,000$ |
| Materials lying at site on 31.02 .2011 | 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 materials used and $6 \%$ of wages may be taken to have been incurred for the portion of work completed but not yet certified. Overheads are charged as a percentage of direct wages.
17. Pallavan Transport Corporations runs the following fleet of buses in a particular area of Chennai for 30 days in a month . 25 buses of 50 passenger capacity, on an average each bus makes 10 trips a day covering a distance of 8 kms in each trip with $75 \%$ of seats occupied. Generally, $10 \%$ of buses are kept from the roads for repairs.

| Monthly expenses | Rs. | Monthly expenses | Rs. |
| :--- | :--- | :--- | :--- |
| Rent | 2,500 | Road tax | 500 |
| Salary of chief operating manager | 1,500 | Consumable stores | 4,500 |
| Salary of three assistant managers | 800 each | Diesel | 34,000 |
| Salary of four supervisors | 400 each | Lubricants | 5,500 |
| Wages of thirty cleaners | 100 each | Replacement of tyres | 1,750 |
| Wages of twenty five drivers | 240 each | Miscellaneous expenses | 2,750 |
| Wages of twenty five conductors | 200 each | Depreciation | 6,500 |
| Work shop expenses | 3,500 |  |  |

Calculate the cost per passenger km of operating the service.

## Section C

## Answer Any TWO questions.

18. Forecast the cash position at the end of April, May and June 2018, from the following information:

| Month 2018 | Sales (Rs.) | Purchases (Rs.) | Wages (Rs.) | Sales expenses (Rs.) |
| :--- | ---: | ---: | ---: | ---: |
| February | $1,20,000$ | 80,000 | 10,000 | 7,000 |
| March | $1,30,000$ | 98,000 | 12,000 | 9,000 |
| April | 70,000 | $1,00,000$ | 8,000 | 5,000 |
| May | $1,16,000$ | $1,03,000$ | 10,000 | 10,000 |
| June | 85,000 | 80,000 | 8,000 | 6,000 |

Additional information:
Sales at $10 \%$ realized in the month of sales. Balance equally realized in two subsequent months.

Purchases ：Creditors are paid in the month following the month of supply．
Wages ： $20 \%$ paid in arrears in the following month．
Sundry expenses paid in the month itself．
Income tax Rs．20，000 payable in June．
Dividend Rs．12，000 payable in June．
Income from investments Rs．2，000 received half yearly in March and September．
Cash balance on hands as on $1 / 4 / 2018$ Rs． 40,000 ．
19．A gang of workers usually consists of 10 men， 5 women and 5 boys in a factory．They are paid at standard hourly rates of Rs．125，Rs． 80 and Rs． 70 respectively．In a normal working week of 40 hours，the gang is expected to produce 1,000 units of output． In a certain week，the gang consisted of 13 men， 4 women and 3 boys．Actual wages were paid at the rate of Rs． 120 ，Rs． 85 and Rs． 65 respectively．Two hours were lost due to abnormal idle time and 960 units of output were produced．
Calculate all possible labour variances．
20．Ramsons Ltd．produces a product which goes through three processes A，B and C before it is finished and sent to the godown for distribution．From the following details ascertain the cost of product at the end of each stage of production．

| Particulars | Process A（Rs．） | Process B（Rs．） | Process C（Rs．） |
| :--- | ---: | ---: | ---: |
| Raw materials | 10,000 | - | - |
| Other direct materials | 30,000 | 20,000 | 10,000 |
| Direct wages | 10,000 | 20,000 | 30,000 |
| Overheads | 10,000 | 8,000 | 20,000 |
| Output in units | 15,000 | 14,000 | 17,000 |
| Opening stock（units from <br> previous process） | - | 6,000 | 5,000 |
| Closing stock（ units from the <br> previous process） | - | 5,000 | 1,000 |

22．The following particulars are taken from the records of a company engaged in manufacturing two products X and Y from a certain raw material：

| Particulars | Product X（Rs．Per unit） | Product Y（Rs．Per unit） |
| :--- | :--- | :--- |
| Sales | 125 | 250 |
| Material cost（Rs．2．5 per kg） | 25 | 62.50 |
| Wages（ Rs．15 per hour） | 37.50 | 75 |
| Variable overhead | 12.50 | 25 |

Total fixed overheads Rs．50，000
Comment on the profitability of each product when：
（a）Total availability of raw material is Rs． $20,000 \mathrm{kgs}$ and maximum sales potential of each product is 1,000 units．Find the product mix to yield maximum profit．Determine the maximum profit．
（b）Total sales in value is limited．
（c）Labour time is limited．
（d）Production capacity in units is a key factor．

