

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 86**  
(For candidates admitted from the academic year 2023 – 2024)

**B.COM DEGREE EXAMINATION, NOVEMBER 2024**  
**ACCOUNTING AND FINANCE**  
**THIRD SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : TOOLS FOR MANAGERIAL DECISION MAKING**  
**COURSE CODE : 23AF/MC/TD34**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

Q. No.	SECTION A Answer all questions	(5 x 2 =10)	CO	KL									
1	State any two differences between Management Accounting and Financial Accounting.		1	1									
2	What is a Master Budget?		1	1									
3	From the following information relating to the month of March, calculate the production volume ratio:  <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td></td> <td style="text-align: center;">Budget</td> <td style="text-align: center;">Actual</td> </tr> <tr> <td style="padding-right: 20px;">Units produced</td> <td style="text-align: center;">12000</td> <td style="text-align: center;">12600</td> </tr> <tr> <td style="padding-right: 20px;">Hours worked</td> <td style="text-align: center;">24000</td> <td style="text-align: center;">26400</td> </tr> </table>		Budget	Actual	Units produced	12000	12600	Hours worked	24000	26400		1	1
	Budget	Actual											
Units produced	12000	12600											
Hours worked	24000	26400											
4	Calculate Fixed cost with the given information: Sales – Rs. 1,00,000; Profit – Rs. 10,000; Variable cost – 70% of sales value.		1	1									
5	From the following information, calculate P/V Ratio:  <table style="margin-left: auto; margin-right: auto; border: 1px solid black; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Year</th> <th style="text-align: center;">Sales (Rs)</th> <th style="text-align: center;">Profit (Rs)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2015</td> <td style="text-align: center;">1,40,000</td> <td style="text-align: center;">15000</td> </tr> <tr> <td style="text-align: center;">2016</td> <td style="text-align: center;">1,60,000</td> <td style="text-align: center;">20000</td> </tr> </tbody> </table>	Year	Sales (Rs)	Profit (Rs)	2015	1,40,000	15000	2016	1,60,000	20000		1	1
Year	Sales (Rs)	Profit (Rs)											
2015	1,40,000	15000											
2016	1,60,000	20000											
Q. No.	SECTION B Answer any 4 questions	(4 x 5 = 20)	CO	KL									
6	Explain the purpose and uses of value-added statements.		2	2									
7	An automobile manufacturing company finds that the cost of making Part No 208 in its own workshop is Rs 6. The same part is available in the market at Rs 5.60 with an assurance of continuous supply. The cost data to make the part are <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td style="padding-right: 20px;">Material</td> <td style="text-align: right;">Rs 2.00</td> </tr> <tr> <td style="padding-right: 20px;">Direct Labour</td> <td style="text-align: right;">Rs 2.50</td> </tr> <tr> <td style="padding-right: 20px;">Other variable cost</td> <td style="text-align: right;">Re 0.50</td> </tr> <tr> <td style="padding-right: 20px;">Fixed cost allocated</td> <td style="text-align: right;">Re 1.00</td> </tr> </table> Should the company make or buy the product?	Material	Rs 2.00	Direct Labour	Rs 2.50	Other variable cost	Re 0.50	Fixed cost allocated	Re 1.00		2	2	
Material	Rs 2.00												
Direct Labour	Rs 2.50												
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Fixed cost allocated	Re 1.00												
8	The labour budget of a company for a week is as under: 20 skilled men at Rs. 5 per hour for 40 hours 40 unskilled men at Rs. 3 per hour for 40 hours The actual employment was as under: 30 skilled men at Rs. 5 per hour for 40 hours 30 unskilled men at Rs. 4 per hour for 40 hours Calculate Labour Cost and Rate Variances.		2	2									



	<p>You are required to ascertain:</p> <p>(a) Break even sales and break even capacity of the merged plant</p> <p>(b) Profit and profitability of operating the merged plant at 90% of the capacity</p> <p>(c) Capacity level of operation, if profit of Rs. 4,00,000 (the profit made by both plants before merger) has to be made by the merged plant.</p>																										
13 a.	<p>A company produces one product and the standard cost card contains the following information.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 30%; text-align: center;">Budgeted Data</th> <th style="width: 30%; text-align: center;">Actual Information</th> </tr> </thead> <tbody> <tr> <td>Output for the month</td> <td style="text-align: center;">4,000 units</td> <td style="text-align: center;">4,400 units</td> </tr> <tr> <td>Fixed overhead</td> <td style="text-align: center;">Rs. 24,000</td> <td style="text-align: center;">Rs. 26,000</td> </tr> <tr> <td>Variable overhead</td> <td style="text-align: center;">Rs. 24,000</td> <td style="text-align: center;">Rs. 34,000</td> </tr> </tbody> </table> <p>Calculate:</p> <p>(a) Total overhead cost variance</p> <p>(b) Fixed overhead cost variance</p> <p>(c) Variable overhead cost variance</p> <p style="text-align: center;">(or)</p>		Budgeted Data	Actual Information	Output for the month	4,000 units	4,400 units	Fixed overhead	Rs. 24,000	Rs. 26,000	Variable overhead	Rs. 24,000	Rs. 34,000	3	3												
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13 b.	<p>From the following data calculate:</p> <p>(a) Expenditure variance</p> <p>(b) Efficiency variance</p> <p>(c) Capacity variance</p> <p>Budgeted labour hours – 4000</p> <p>Standard direct hours for actual production – 4200</p> <p>Actual direct labour hours – 4300</p> <p>Actual labour expenses incurred:</p> <p style="padding-left: 20px;">Variable – Rs. 4500</p> <p style="padding-left: 20px;">Fixed – Rs. 8500</p> <p>Applied overhead rate:</p> <p>Rs. 3 per direct labour hour (of which Rs. 2 per hour being fixed overheads)</p>	3	3																								
14 a.	<p>From the following data, prepare a production budget for Kannan Co. Ltd.</p> <p>Stocks for the budgeted period:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Product</th> <th style="width: 40%; text-align: center;">As on 1<sup>st</sup> January</th> <th style="width: 40%; text-align: center;">As on 30<sup>th</sup> June</th> </tr> </thead> <tbody> <tr> <td>A</td> <td style="text-align: center;">8000 units</td> <td style="text-align: center;">10000 units</td> </tr> <tr> <td>B</td> <td style="text-align: center;">9000 units</td> <td style="text-align: center;">8000 units</td> </tr> <tr> <td>C</td> <td style="text-align: center;">12000 units</td> <td style="text-align: center;">14000 units</td> </tr> </tbody> </table> <p>Requirements to fulfil sales programme:</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 20%;">A</td> <td style="width: 80%; text-align: center;">60000 units</td> </tr> <tr> <td>B</td> <td style="text-align: center;">50000 units</td> </tr> <tr> <td>C</td> <td style="text-align: center;">80000 units</td> </tr> </tbody> </table> <p>Normal loss in production:</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 20%;">A</td> <td style="width: 80%; text-align: center;">4%</td> </tr> <tr> <td>B</td> <td style="text-align: center;">2%</td> </tr> <tr> <td>C</td> <td style="text-align: center;">6%</td> </tr> </tbody> </table> <p style="text-align: center;">(or)</p>	Product	As on 1 <sup>st</sup> January	As on 30 <sup>th</sup> June	A	8000 units	10000 units	B	9000 units	8000 units	C	12000 units	14000 units	A	60000 units	B	50000 units	C	80000 units	A	4%	B	2%	C	6%	4	4
Product	As on 1 <sup>st</sup> January	As on 30 <sup>th</sup> June																									
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14 b.	<p>A company produces a standard product. The estimated costs per unit are as follows:</p> <p>Raw materials Rs. 4, wages Rs. 2, Variable overhead Rs. 5</p> <p>The semi-variable costs are: Indirect material – Rs. 235, Repair – Rs. 570, Indirect Labour – Rs. 156</p>	4	4																								

	<p>The per unit variable costs included in semi-variable costs are as follows:          Indirect material – Re. 0.05, Labour – Re. 0.08, Repairs – Re. 0.10          The fixed costs are: Factory Rs. 2000, Administration – Rs. 3000. Selling and distribution – Rs. 2500          The above costs are for 70% of normal capacity producing 700 units. The selling price is Rs. 20 per unit. Prepare flexible budget for 80% and 100% normal capacities from the above information.</p>																																
15 a.	<p>Estimate the impact on Break-even Point of the following changes:          (i) Variable cost increase by 10%          (ii) Variable cost decrease by 50% and fixed cost increase by 30%          Given particulars are below:          Fixed cost – Rs. 15,000; Selling Price per unit – Rs. 15;          Variable cost per unit – Rs. 9</p>	4	4																														
15 b.	<p>(or)          Tata Ltd. requests you to assist in deciding the purchase of a particular brand of machine, with the help of the following:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Brand I</th> <th>Brand II</th> </tr> <tr> <th></th> <th>Rs.</th> <th>Rs.</th> </tr> </thead> <tbody> <tr> <td>Depreciation and other fixed costs p.a.</td> <td>50,000</td> <td>15,000</td> </tr> <tr> <td>Fuel and other operating expenses per unit</td> <td>12.50</td> <td>19.50</td> </tr> </tbody> </table> <p>i. Which brand is preferable for the production of 4,500 units currently in demand?          ii. If demand is expected to reach 8,000 units and increase further in future, which brand is better          iii. Ascertain the range of output where each brand is more economical.</p>		Brand I	Brand II		Rs.	Rs.	Depreciation and other fixed costs p.a.	50,000	15,000	Fuel and other operating expenses per unit	12.50	19.50	4	4																		
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<b>Q. No.</b>	<b>SECTION D</b>	<b>(2 x 15 = 30)</b>	<b>CO KL</b>																														
	<b>Answer any two questions</b>																																
16	<p>The following particulars are extracted from the records of a company:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Product A</th> <th>Product B</th> </tr> </thead> <tbody> <tr> <td>Sales per unit</td> <td>Rs. 100</td> <td>Rs. 120</td> </tr> <tr> <td>Consumption of Material</td> <td>2 kgs</td> <td>3 kgs</td> </tr> <tr> <td>Material cost</td> <td>Rs. 10</td> <td>Rs. 15</td> </tr> <tr> <td>Direct wages cost</td> <td>Rs. 15</td> <td>Rs. 10</td> </tr> <tr> <td>Direct expenses</td> <td>Rs. 5</td> <td>Rs. 6</td> </tr> <tr> <td>Machine hours used</td> <td>3</td> <td>2</td> </tr> <tr> <td>Overhead Expenses:</td> <td></td> <td></td> </tr> <tr> <td>Fixed</td> <td>Rs. 5</td> <td>Rs. 10</td> </tr> <tr> <td>Variable</td> <td>Rs. 15</td> <td>Rs. 20</td> </tr> </tbody> </table> <p>Direct wages per hour Rs. 5. Comment on the profitability of each product (both use the same new materials) when:          (i) Total sales potential in units is limited          (ii) Total sales potential in value is limited          (iii) Raw material is in short supply          (iv) Production capacity (in terms of machine hours) is the limiting factor</p> <p>Assuming raw material as the key factor, availability of which is 10,000 kgs and maximum sales potential of each product being 3,500 units, find out the product mix which will yield the maximum profit.</p>		Product A	Product B	Sales per unit	Rs. 100	Rs. 120	Consumption of Material	2 kgs	3 kgs	Material cost	Rs. 10	Rs. 15	Direct wages cost	Rs. 15	Rs. 10	Direct expenses	Rs. 5	Rs. 6	Machine hours used	3	2	Overhead Expenses:			Fixed	Rs. 5	Rs. 10	Variable	Rs. 15	Rs. 20	5	5
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Variable	Rs. 15	Rs. 20																															

17	<p>The standard material cost to produce a tonne of Chemical X is:  300 kg of material A @ Rs. 10 per kg  400 kg of material B @ Rs. 5 per kg  500 kg of material C @ Rs. 6 per kg  During the period, 100 tonnes of Chemical X was produced from a mixture of  35 tonnes of material A @ Rs. 9000 per tonne  42 tonnes of material B @ Rs. 6000 per tonne  53 tonnes of material C @ Rs. 7000 per tonne  Calculate Material Variances.</p>	5	5																																										
18	<p>X Ltd. wishes to prepare cash budget from January to June.</p> <table border="1" data-bbox="263 622 1232 1025"> <thead> <tr> <th>Months</th> <th>Total Sales Rs.</th> <th>Materials Rs.</th> <th>Wages Rs.</th> <th>Production Overhead Rs.</th> <th>Selling distribution overhead Rs.</th> </tr> </thead> <tbody> <tr> <td>January</td> <td>20,000</td> <td>20,000</td> <td>4,000</td> <td>3,200</td> <td>800</td> </tr> <tr> <td>February</td> <td>22,000</td> <td>14,000</td> <td>4,400</td> <td>3,300</td> <td>900</td> </tr> <tr> <td>March</td> <td>24,000</td> <td>14,000</td> <td>4,600</td> <td>3,300</td> <td>800</td> </tr> <tr> <td>April</td> <td>26,000</td> <td>12,000</td> <td>4,600</td> <td>3,400</td> <td>900</td> </tr> <tr> <td>May</td> <td>28,000</td> <td>12,000</td> <td>4,800</td> <td>3,500</td> <td>900</td> </tr> <tr> <td>June</td> <td>30,000</td> <td>18,000</td> <td>4,800</td> <td>3,600</td> <td>1,000</td> </tr> </tbody> </table> <p>Cash balance on 1<sup>st</sup> January was Rs. 10,000. A new machine is to be installed at Rs. 30,000 on credit to be repaid by two equal instalments in March and April. Sales commission at 5% on total sales is to be paid within the month following actual sales. Rs. 10,000 being the amount by second call may be received in March. Share premium amounting to Rs. 2,000 is also obtained with second call. Income from investments Rs. 5,000 to be received in January and May. Period of credit allowed by suppliers – 2 months  Period of credit allowed to customers – 2 months  Delay in payment of overheads – ½ month  Assume cash sales to be 50% of the total sales.</p>	Months	Total Sales Rs.	Materials Rs.	Wages Rs.	Production Overhead Rs.	Selling distribution overhead Rs.	January	20,000	20,000	4,000	3,200	800	February	22,000	14,000	4,400	3,300	900	March	24,000	14,000	4,600	3,300	800	April	26,000	12,000	4,600	3,400	900	May	28,000	12,000	4,800	3,500	900	June	30,000	18,000	4,800	3,600	1,000	5	5
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