

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

B.VOC. DEGREE EXAMINATION, APRIL 2026
BANKING, FINANCIAL SERVICES AND INSURANCE
FOURTH SEMESTER

COURSE : MAJOR CORE

PAPER : COST AND MANAGEMENT ACCOUNTING

SUBJECT CODE : 23VB/VM/CM46

TIME : 3 HOURS

MAX. MARKS: 100

SECTION A			
Q. No.	Answer all the questions (theory not exceeding 50 words). (5 x 2 = 10)	CO	KL
1.	Define Cost Accounting.	1	K1
2.	Write a note on capital budgeting.	1	K1
3.	A machine costs ₹1,00,000 and has a scrap value of ₹10,000. Its life is 9,000 hours. Annual overheads are ₹45,000. The machine works for 3,000 hours per year. Find the Machine Hour Rate.	1	K1
4.	Annual demand = 10,000 units Ordering cost = ₹200 per order Carrying cost per unit per year = ₹5 Find EOQ.	1	K1
5.	Ascertain the bonus under Rowan scheme: Standard time: 12 hours Actual time: 8 hours Time rate: Rs.1.50 per hour	1	K1
SECTION B			
Q. No.	Answer any four of the following questions (theory not exceeding 150 words) . (4 x 5 = 20)	CO	KL
6.	Distinguish between cost and management accounting.	2	K2
7.	Standard output per day = 50 units Normal wage rate = ₹200 per day Taylor's differential rates: 80% of piece rate for below standard 120% of piece rate for at or above standard Worker A produces 45 units Worker B produces 60 units Calculate wages payable to Worker A and Worker B.	2	K2
8.	The production department of a factory has furnished the following details: Direct wages – Rs.1,50,000 Production overhead – Rs.75,000 Compute overhead recovery rate on the basis of direct labour.	2	K2
9.	Cost of machine = ₹2,00,000 Scrap value = ₹20,000 Estimated life = 10,000 hours Repairs per year = ₹30,000 Power cost per hour = ₹8 Machine works 2,000 hours per year Calculate the Machine Hour Rate.	2	K2

10.	Compute the pay back period for the following: Original investment – Rs. 15,000 Annual cash inflow –Rs.7,500	2	K2																								
11.	A company has the following transactions for Material X. Prepare ledger account under FIFO method <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Date</th> <th style="width: 40%;">Particulars</th> <th style="width: 15%;">Units</th> <th style="width: 30%;">Rate</th> </tr> </thead> <tbody> <tr> <td>Jan 1</td> <td>Opening Stock</td> <td>200</td> <td>20</td> </tr> <tr> <td>Jan 5</td> <td>Purchase</td> <td>300</td> <td>22</td> </tr> <tr> <td>Jan 10</td> <td>Issue</td> <td>250</td> <td>-</td> </tr> <tr> <td>Jan 15</td> <td>Purchase</td> <td>200</td> <td>24</td> </tr> <tr> <td>Jan 20</td> <td>Issue</td> <td>300</td> <td>-</td> </tr> </tbody> </table>	Date	Particulars	Units	Rate	Jan 1	Opening Stock	200	20	Jan 5	Purchase	300	22	Jan 10	Issue	250	-	Jan 15	Purchase	200	24	Jan 20	Issue	300	-	2	K2
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SECTION C																											
Q. No.	Answer all the questions:	(4 x 10 = 40)	CO KL																								
12.	a) Standard time allowed = 12 hours Actual time taken = 9 hours Hourly wage rate = ₹60 i) Dearness allowance = 10% of basic wages ii) Bonus under Rowan plan is calculated on basic wages only. Calculate total earnings of the worker under Rowan Premium Plan. (OR) b) Initial investment = ₹1,60,000 Annual cash inflow = ₹50,000 for 5 years PV Factors: At 12% → 3.605 At 15% → 3.352 Calculate IRR. Suggest decision if required rate of return is 13%.	3	K3																								
13.	a) Calculate the normal and overtime wages payable to a workman from the following data: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Days</th> <th style="width: 50%;">Hours worked</th> </tr> </thead> <tbody> <tr> <td>Monday</td> <td>8</td> </tr> <tr> <td>Tuesday</td> <td>12</td> </tr> <tr> <td>Wednesday</td> <td>10</td> </tr> <tr> <td>Thursday</td> <td>10</td> </tr> <tr> <td>Friday</td> <td>9</td> </tr> <tr> <td>Saturday</td> <td>4</td> </tr> </tbody> </table> Normal working hours – 8 hours per day; on Saturday – 4 hours. Normal rate Rs. 2 per hour. Overtime rate – Upto 9 hours in a day at single rate and over 9 hours in a day at double rate. Or upto 48 hours in a week at single rate and over 48 hours at double rate, whichever is more beneficial to the workers.	Days	Hours worked	Monday	8	Tuesday	12	Wednesday	10	Thursday	10	Friday	9	Saturday	4	3	K3										
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	<p style="text-align: center;">(OR)</p> <p>b) Material 'A' is used as follows: Maximum usage in a month: 600 units Minimum usage in a month: 400 units Average usage in a month: 450 units Lead time: Maximum 6 months, minimum 2 months. Reorder Quantity: 1500 units Maximum reorder period for emergency purchases -1 month Calculate i) Reorder level ii) Maximum level iii) Minimum level iv) Average stock level v) Danger level</p>																												
14.	<p>a) Initial investment = ₹2,50,000 Expected cash inflows:</p> <table border="1" data-bbox="395 797 1050 1126"> <thead> <tr> <th>Year</th> <th>Cash Inflow (Rs)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>80,000</td> </tr> <tr> <td>2</td> <td>90,000</td> </tr> <tr> <td>3</td> <td>1,00,000</td> </tr> <tr> <td>4</td> <td>70,000</td> </tr> </tbody> </table> <p>Cost of capital = 12% Salvage value of ₹20,000 at end of Year 4. Calculate NPV and state whether the project should be accepted.</p>	Year	Cash Inflow (Rs)	1	80,000	2	90,000	3	1,00,000	4	70,000	4	K4																
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	10% of canteen expenses is to be treated as office expenses (not factory overhead). Apportion the overheads among the three departments																																																																					
15.	<p>a) Krishna producing concern is divided into four departments. A, B, C are production departments and D is a service department. The actual expenses for a period are as follows:</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Amount (Rs.)</th> </tr> </thead> <tbody> <tr> <td>Rent</td> <td>10,000</td> </tr> <tr> <td>Repairs to plant</td> <td>6,000</td> </tr> <tr> <td>Depreciation of plant</td> <td>4,500</td> </tr> <tr> <td>Lighting expenses</td> <td>1,000</td> </tr> <tr> <td>Supervisory expenses</td> <td>15,000</td> </tr> <tr> <td>Fire insurance (on stock)</td> <td>5,000</td> </tr> <tr> <td>Power</td> <td>9,000</td> </tr> <tr> <td>Employer's liability for insurance</td> <td>1,500</td> </tr> </tbody> </table> <p>The following information is available in respect of the four departments:</p> <table border="1"> <thead> <tr> <th rowspan="2">Particulars</th> <th colspan="4">Department</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Area (Sq. ft)</td> <td>1500</td> <td>1100</td> <td>900</td> <td>500</td> </tr> <tr> <td>Number of lights</td> <td>75</td> <td>11</td> <td>9</td> <td>5</td> </tr> <tr> <td>Number of employees</td> <td>200</td> <td>150</td> <td>100</td> <td>50</td> </tr> <tr> <td>Total wages (Rs.)</td> <td>60,000</td> <td>40,000</td> <td>30,000</td> <td>20,000</td> </tr> <tr> <td>Value of plant (Rs.)</td> <td>2,40,000</td> <td>1,80,000</td> <td>1,20,000</td> <td>60,000</td> </tr> <tr> <td>Value of stock (Rs.)</td> <td>1,50,000</td> <td>90,000</td> <td>60,000</td> <td>-</td> </tr> </tbody> </table> <p>Apportion the costs to the various departments on the most equipment method.</p> <p style="text-align: center;">(OR)</p> <p>b) Initial investment = ₹4,00,000 Scrap value = ₹40,000 Life of project = 4 years Expected profits before depreciation:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Profit (Rs)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1,20,000</td> </tr> <tr> <td>2</td> <td>1,00,000</td> </tr> <tr> <td>3</td> <td>90,000</td> </tr> <tr> <td>4</td> <td>70,000</td> </tr> </tbody> </table> <p>Depreciation on straight-line methods. Calculate ARR on</p> <ol style="list-style-type: none"> Original Investment Average Investment 	Particulars	Amount (Rs.)	Rent	10,000	Repairs to plant	6,000	Depreciation of plant	4,500	Lighting expenses	1,000	Supervisory expenses	15,000	Fire insurance (on stock)	5,000	Power	9,000	Employer's liability for insurance	1,500	Particulars	Department				A	B	C	D	Area (Sq. ft)	1500	1100	900	500	Number of lights	75	11	9	5	Number of employees	200	150	100	50	Total wages (Rs.)	60,000	40,000	30,000	20,000	Value of plant (Rs.)	2,40,000	1,80,000	1,20,000	60,000	Value of stock (Rs.)	1,50,000	90,000	60,000	-	Year	Profit (Rs)	1	1,20,000	2	1,00,000	3	90,000	4	70,000	4	K4
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Q. No.	Answer the following question:	(2 x 15 = 30)	CO KL																																
16.	<p>In a factory, there are two service departments I and II and three production departments A,B and C. In April 2023, the departmental expenses were</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Departments</th> <th style="width: 15%;">A</th> <th style="width: 15%;">B</th> <th style="width: 15%;">C</th> <th style="width: 15%;">I</th> <th style="width: 15%;">II</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">6,50,000</td> <td style="text-align: center;">6,00,000</td> <td style="text-align: center;">5,00,000</td> <td style="text-align: center;">1,20,000</td> <td style="text-align: center;">1,00,000</td> </tr> </tbody> </table> <p>The expenses of the service departments are allotted on a percentage basis as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Particulars</th> <th style="width: 15%;">A</th> <th style="width: 15%;">B</th> <th style="width: 15%;">C</th> <th style="width: 15%;">I</th> <th style="width: 15%;">II</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">I</td> <td style="text-align: center;">30</td> <td style="text-align: center;">40</td> <td style="text-align: center;">15</td> <td style="text-align: center;">-</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: center;">II</td> <td style="text-align: center;">40</td> <td style="text-align: center;">30</td> <td style="text-align: center;">25</td> <td style="text-align: center;">5</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> <p>Prepare a statement showing distribution of the expenses of the two service departments on a percentage basis by repeated distribution method.</p>	Departments	A	B	C	I	II		6,50,000	6,00,000	5,00,000	1,20,000	1,00,000	Particulars	A	B	C	I	II	I	30	40	15	-	15	II	40	30	25	5	-	5	K5		
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17.	<p>A company is considering a project requiring an initial investment of ₹2,00,000. The expected cash inflows are:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Year</th> <th style="width: 60%;">Cash Inflow</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">60,000</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">70,000</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">80,000</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">50,000</td> </tr> </tbody> </table> <p>Cost of capital = 10%</p> <p>a) Calculate Payback Period. b) Calculate Net Present Value (NPV). c) State whether the project should be accepted.</p>	Year	Cash Inflow	1	60,000	2	70,000	3	80,000	4	50,000	5	K5																						
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18.	<p>A company maintains stores ledger under LIFO method. The following transactions relate to Material A for March 2026:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Date</th> <th style="width: 35%;">Particulars</th> <th style="width: 15%;">Units</th> <th style="width: 35%;">Rate</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Mar 1</td> <td style="text-align: center;">Opening Stock</td> <td style="text-align: center;">500</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">Mar 5</td> <td style="text-align: center;">Purchase</td> <td style="text-align: center;">400</td> <td style="text-align: center;">22</td> </tr> <tr> <td style="text-align: center;">Mar 10</td> <td style="text-align: center;">Issue</td> <td style="text-align: center;">600</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">Mar 15</td> <td style="text-align: center;">Purchase</td> <td style="text-align: center;">300</td> <td style="text-align: center;">24</td> </tr> <tr> <td style="text-align: center;">Mar 18</td> <td style="text-align: center;">Issue</td> <td style="text-align: center;">200</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">Mar 22</td> <td style="text-align: center;">Purchase</td> <td style="text-align: center;">500</td> <td style="text-align: center;">25</td> </tr> <tr> <td style="text-align: center;">Mar 25</td> <td style="text-align: center;">Issue</td> <td style="text-align: center;">400</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> <p>a) Prepare the Stores Ledger Account using the LIFO method. b) Find the value of closing stock. c) Calculate total value of materials issued during the month.</p>	Date	Particulars	Units	Rate	Mar 1	Opening Stock	500	10	Mar 5	Purchase	400	22	Mar 10	Issue	600	-	Mar 15	Purchase	300	24	Mar 18	Issue	200	-	Mar 22	Purchase	500	25	Mar 25	Issue	400	-	5	K5
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