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# B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

## May / June 2025 Semester End Main Examinations

**Programme: B.E.**

**Semester: VIII**

**Branch: Institutional Elective**

**Duration: 3 hrs.**

**Course Code: 22ME8OEFIM / 20ME8OEFIM**

**Max Marks: 100**

**Course: Financial Management**

**Instructions:** 1. Answer any FIVE full questions, choosing one full question from each unit.  
 2. Missing data, if any, may be suitably assumed.  
 3. Compound interest tables are permitted.

			UNIT - I			CO	PO	Marks													
<b>Important Note:</b> Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.	1	a)	Describe the various forms of business organization.			CO1	PO1	10													
		b)	A financial analyst is analyzing two investment alternatives Y and Z. Their rate of returns under different probabilities are as follows:			CO1	PO1 PO2	10													
			<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Probability</th> <th colspan="2">Rate of Return</th> </tr> <tr> <th>Y</th> <th>Z</th> </tr> </thead> <tbody> <tr> <td>0.2</td> <td>22%</td> <td>5%</td> </tr> <tr> <td>0.6</td> <td>14%</td> <td>15%</td> </tr> <tr> <td>0.2</td> <td>- 4%</td> <td>25%</td> </tr> </tbody> </table>			Probability	Rate of Return		Y	Z	0.2	22%	5%	0.6	14%	15%	0.2	- 4%	25%		
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	Y	Z																			
0.2	22%	5%																			
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		i) For Y and Z, determine the expected rate of return, variance and standard deviation ii) Is Y comparatively less risky investment? Explain. iii) If the financial analyst wishes to invest equal amounts of Y and Z, would it reduce risk? Explain.																			
<b>OR</b>																					
	2	a)	An investor has analyzed a share for a one year holding period. The share is currently sold for Rs. 43 but pays no dividends and there is a fifty – fifty chance that the share will sell for either Rs. 55 or Rs. 60 by the year end. What is the expected return and risk if 250 shares are acquired with 80% borrowed funds? Assume the cost of the borrowed funds to be 12%. (Ignore commissions and taxes).			CO1	PO1 PO2	10													
		b)	List and explain the methods of measuring risk.			CO1	PO1	10													
<b>UNIT - II</b>																					
	3	a)	Discuss the need and factors influencing the working capital requirement.			CO2	PO1	10													

	b)	<p>From the following information of a manufacturing concerns compute the operating cycle in days.</p> <table border="1"> <tr><td>Period covered</td><td>365 days</td></tr> <tr><td>Average period of Cr. allowed by suppliers</td><td>16 days</td></tr> <tr><td>Average debtor's o/s</td><td>Rs. 480</td></tr> <tr><td>Raw material consumption</td><td>Rs. 4,400</td></tr> <tr><td>Total production cost</td><td>Rs. 10,000</td></tr> <tr><td>Total cost of goods sold</td><td>Rs. 10,500</td></tr> <tr><td>Sales for the year</td><td>Rs. 16,000</td></tr> <tr><td>Value of average stock maintained:</td><td></td></tr> <tr><td>    Raw Material</td><td>320</td></tr> <tr><td>    WIP</td><td>350</td></tr> <tr><td>    Finished goods</td><td>260</td></tr> </table>	Period covered	365 days	Average period of Cr. allowed by suppliers	16 days	Average debtor's o/s	Rs. 480	Raw material consumption	Rs. 4,400	Total production cost	Rs. 10,000	Total cost of goods sold	Rs. 10,500	Sales for the year	Rs. 16,000	Value of average stock maintained:		Raw Material	320	WIP	350	Finished goods	260	CO2	PO1 PO2	<b>06</b>
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	c)	Highlight the merits and demerits of equity shares.	CO3	PO1	<b>04</b>																						
		<b>OR</b>																									
4	a)	<p>A firm is thinking of a right issue to raise Rs. 5 crore. It has a 5 lakh shares outstanding and the current market price of the share is Rs. 170. The subscription price on the new share will be Rs. 125 per share.</p> <ol style="list-style-type: none"> <li>How many shares should be sold to raise the required funds?</li> <li>How many rights are needed to purchase one new share?</li> <li>What is the value of one right?</li> </ol>	CO3	PO1 PO2	<b>06</b>																						
	b)	<p>Assume that the Engineering firm has chosen the moderate working capital policy (that is, investment of Rs. 3.90 crores in current assets). The company is now examining the use of long term and short-term borrowing for financing its assets. The company will use Rs. 2.50 crore of equity funds, fixed assets of Rs. 2.6 crore and current liabilities of Rs. 2.34 crore. The corporate tax rate is 35%. The company is considering the following debt alternatives:</p> <table border="1"> <thead> <tr> <th>Financing policy</th> <th>Short – term debt (Rs. in cr.)</th> <th>Long term debt (Rs. in cr.)</th> </tr> </thead> <tbody> <tr> <td>Conservative</td> <td>0.54</td> <td>1.12</td> </tr> <tr> <td>Moderate</td> <td>1</td> <td>0.66</td> </tr> <tr> <td>Aggressive</td> <td>1.5</td> <td>0.16</td> </tr> </tbody> </table> <p>The average effective interest rate on short – term debt is 12% while on long – term debt it is 16%. Determine the following for each of the financial policies;</p> <ol style="list-style-type: none"> <li>Rate of return on shareholder's equity</li> <li>Net working capital position, and</li> <li>Current ratio.</li> </ol> <p>Also, evaluate the return-risk tradeoffs of these policies.</p>	Financing policy	Short – term debt (Rs. in cr.)	Long term debt (Rs. in cr.)	Conservative	0.54	1.12	Moderate	1	0.66	Aggressive	1.5	0.16	CO2	PO1 PO2	<b>08</b>										
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	c)	Discuss the different types of debentures.	CO3	PO1	<b>06</b>																						

<b>UNIT - III</b>					
5	a)	Discuss the different types of accounts and the rules governing it.	<i>CO4</i>	<i>PO1</i>	<b>06</b>
	b)	<p>The following balances are extracted from the books of M/s. Maria Waseem, Prepare Trial Balance as on 30.6.2015.</p> <p>Owner's Equity Rs. 470,200  Machinery Rs. 158,800  Cash in hand Rs. 6,000  Account receivable Rs. 48,000  Building Rs. 320,000  Repairs Rs. 5,400  Stock Rs. 33,000  Insurance premium Rs. 3,300  Account payable Rs. 26,000  Sales Rs. 290,000  Commission Rs. 750  Telephone charges Rs. 6,450  Rent &amp; Taxes Rs. 6,300  Furniture Rs. 11,000  Purchases Rs. 165,000  Discount earned Rs. 1,100  Loan from Sidra Rs. 51,000  Salaries Rs. 70,600  Reserve fund Rs. 5,900  Discount allowed Rs. 650  Note receivable Rs. 8,600  Drawings Rs. 5,000  Bad debts Rs. 1,350  Bills payable Rs. 6,000</p>	<i>CO4</i>	<i>PO1</i> <i>PO2</i>	<b>08</b>
	c)	<p>Pass the necessary journal entries related to the following transactions in the book of R.K. Pvt. Ltd.</p> <p>(i) On 1 April 2023, purchased goods for cash ₹40,000 and paid ₹2,000 for their carriage.</p> <p>(ii) On 11 April 2023, Amar who owned ₹20,000 declared insolvent.</p> <p>(iii) On 16 April 2023, Machinery bought for ₹5,00,000 and paid ₹25,000 for its installation.</p> <p>(iv) On 19 April 2023, further paid ₹5,000 on the carriage of the machine bought.</p> <p>(v) On 24 April 2023, purchased bricks and timber for ₹10,00,000 for construction of the building and made payment through cheque.</p> <p>(vi) On 29 April 2023, Amar who was earlier declared insolvent paid 30 paise in Rupee.</p>	<i>CO4</i>	<i>PO1</i> <i>PO2</i>	<b>06</b>
		<b>OR</b>			

6		From the following Trial Balance of Gopinath prepare Trading and Profit and Loss Account for the year ended December 31, 1986 and Balance Sheet as on that date.		CO4	PO1 PO2																																																																	
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		You are required to consider the following adjustments:																																																																				
1		Stock on December 31, 1986 was valued at Rs. 10,200.																																																																				
2		Provide for doubtful debts at 5% on Sundry Debtors and for Discount on Creditors at 2%.																																																																				
3		Rent due was Rs. 160.																																																																				
4		Taxes of Rs. 320 were paid in advance.																																																																				
5		Depreciate Furniture at 10% per annum.																																																																				
6		Apprentice Premium of Rs. 120 was to be carried forward.																																																																				
7		Calculate interest on capital at 5% per annum.																																																																				
		<b>UNIT - IV</b>																																																																				
7	a)	How are costs classified? Give its characteristics.		CO5	PO1																																																																	
	b)	From the following information prepare a statement showing (i) Prime cost (ii) Works cost (iii) Cost of Production (iv) Cost of Sales (v) Net profit of X Ltd. which produced and sold 1000 units in June 2019.		CO5	PO1 PO2																																																																	
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			Sales	2,00,000																		
			Direct Wages	35,000																		
			Factory Wages	2,000																		
			Carriage Inward	2,000																		
			Carriage Outward	1,000																		
			Factory Expenses	4,000																		
			Office Salaries	15,000																		
			Office Expenses	12,000																		
			Factory Rent & Rates	2,500																		
			Depreciation - Machinery	2,500																		
			Bad Debts	1,500																		
	c)	Define Job costing. Give its key features for cost control.			<i>CO5</i>	<i>PO1</i>	<b>05</b>															
			<b>OR</b>																			
8	a)	A manufacturing company operating a standard costing system. The actual data is given below; Actual No. of working days = 22 Actual man hrs. during month = 8600 Units produced = 850 Actual fixed overhead cost = Rs. 3600 The std. data is given below, Budgeting No. of working days/ month = 20 Man hrs./ month = 8000 Std. man hrs. required / unit = 10 Std. fixed overhead rate / hr. = Rs. 0.5 Calculate the overhead variances.			<i>CO5</i>	<i>PO1</i> <i>PO2</i>	<b>12</b>															
	b)	Calculate the total labor variances for workman A & B required to produce one unit of product A.			<i>CO5</i>	<i>PO1</i> <i>PO2</i>	<b>08</b>															
		<table border="1"> <thead> <tr> <th>Particulars</th> <th>Std. hrs. / unit</th> <th>Std. rate / hr.</th> <th>Actual / unit</th> <th>Actual rate / hr.</th> </tr> </thead> <tbody> <tr> <td>Workman A</td> <td>20</td> <td>3</td> <td>30</td> <td>3</td> </tr> <tr> <td>Workman B</td> <td>25</td> <td>4</td> <td>15</td> <td>4.5</td> </tr> </tbody> </table>	Particulars	Std. hrs. / unit	Std. rate / hr.	Actual / unit	Actual rate / hr.	Workman A	20	3	30	3	Workman B	25	4	15	4.5					
Particulars	Std. hrs. / unit	Std. rate / hr.	Actual / unit	Actual rate / hr.																		
Workman A	20	3	30	3																		
Workman B	25	4	15	4.5																		
			<b>UNIT - V</b>																			
9	a)	Describe the essentials of Walter's dividend model. Explain its shortcomings.			<i>CO6</i>	<i>PO1</i>	<b>10</b>															

		b)	Discuss the issues of bonus shares in India.	CO6	PO1	<b>10</b>
			<b>OR</b>			
10	a)		<p>The earnings per share of a company are Rs. 10. It has an internal rate of return of 15% and the capitalization rate of its risk class is 12.5%. If Walter's model is used:</p> <ul style="list-style-type: none"> <li>i) What should be the optimum payout ratio of the firm?</li> <li>ii) What would be the price of the share at the payout?</li> <li>iii) How shall the price of the share be affected if a different payout were employed?</li> </ul>	CO6	PO1 PO2	<b>10</b>
	b)		<p>A company has a total investment of Rs. 5, 00,000 in assets, and 50,000 outstanding ordinary shares at Rs. 10 per share (par value). It earns a rate of 15% on its investment, and has a policy of retaining 50% of the earnings. If the appropriate discount rate of the firm is 10%, Determine the price of its share using Gordon's model. What shall happen to the price of the share if the company has a payout of 80% or 20%?</p>	CO6		<b>10</b>

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B.M.S.C.E. - EVEN SEMESTER 2014-25