

SVKM's NMIMS
MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING /
SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

Academic Year: 2022-23

Programme: B. Tech (CSBS)

Year: IV

Semester: VII

Subject: Financial Management

Date: 21 November 2022

Marks: 100

Time: 2.00 pm - 5.00 pm

Durations: 3 (Hrs)

No. of Pages: 13

Final Examination

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.

- 1) Question No. 1 is compulsory.
- 2) Out of remaining questions, attempt any 4 questions.
- 3) In all 5 questions to be attempted.
- 4) All questions carry equal marks.
- 5) Answer to each new question to be started on a fresh page.
- 6) Figures in brackets on the right hand side indicate full marks.
- 7) Assume Suitable data if necessary.
- 8) Calculators are allowed
- 9) Present value and Future value tables attached to the Question paper.

Q1		Answer briefly:	[20]
CO-2 ; SO-Understanding and comparison of each technique ; BL- Define & Compare.	a.	Explain IRR technique of Capital Budgeting. At IRR what are the values of NPV and Benefit Cost ratio.	[5/20]
CO-2 ; SO- understanding the importance of Diversification of portfolio ; BL- Define & Relate.	b.	Define Diversification of portfolio? Explain the relationship between Diversification and Risk.	[5/20]
CO- 2; SO-Apply the concept of Time value of money ; BL- Apply	c.	Mrs. Khan deposits ₹ 8000 quarterly, in a recurring deposit for 5 years in a bank. The bank offers 8% p.a. compounded quarterly. Find the effective rate of interest p.a. Also find the accumulated value.	[5/20]

CO- 2; SO- learning valuation of securities; BL- Remember & Apply valuation process	d.	The Market price of a ₹1000, par value bond carrying a coupon rate of 14% and maturing after 5 years in ₹ 1060. What is the YTM as per trial and error method, if the YTM lies between 12% and 13%?	[5/20]															
Q2 CO-2; SO-Application of concepts of Risk and Return; BL- Apply	a.	<p>A stock costing ₹ 200 pays no dividends. The possible prices that the stock might sell for at the end of the year and the probability of each rate are:</p> <p>$\frac{250-200}{200}$</p> <table><tr><th>Possible prices (₹)</th><th>Probability</th></tr><tr><td>250</td><td>0.1</td></tr><tr><td>220</td><td>0.25</td></tr><tr><td>240</td><td>0.35</td></tr><tr><td>270</td><td>0.2</td></tr><tr><td>300</td><td>0.1</td></tr></table> <p>(a) What is the <u>expected Return</u>? 0.115 ECR) (b) What is the <u>standard deviation of the returns</u>? 0.1745</p>	Possible prices (₹)	Probability	250	0.1	220	0.25	240	0.35	270	0.2	300	0.1	[10/20]			
Possible prices (₹)	Probability																	
250	0.1																	
220	0.25																	
240	0.35																	
270	0.2																	
300	0.1																	
CO-3; SO-Understanding the importance of Leverage; BL-Apply & Compare	b.	<p>Calculate Operating Leverage, Financial Leverage and Combined Leverage under situations A,B and Financial plans I,II respectively from the following information relating to operating and capital structure of ABC Ltd.</p> <p>Installed capacity = 120000 units Actual production = 80000 units Selling price per unit = ₹ 25 Variable cost per unit = ₹ 15 Fixed cost: Situation A = ₹ 500000 Situation B = ₹ 600000 Capital structure:</p> <table><tr><th></th><th colspan="2">Financial Plan</th></tr><tr><th></th><th>I</th><th>II</th></tr><tr><td>Equity</td><td>₹ 5,00,000</td><td>₹ 7,50,000</td></tr><tr><td>Debt (cost of Debt @ 11%)</td><td>₹ 5,00,000</td><td>₹ 2,50,000</td></tr><tr><td>TOTAL</td><td>₹ 10,00,000</td><td>₹ 10,00,000</td></tr></table>		Financial Plan			I	II	Equity	₹ 5,00,000	₹ 7,50,000	Debt (cost of Debt @ 11%)	₹ 5,00,000	₹ 2,50,000	TOTAL	₹ 10,00,000	₹ 10,00,000	[10/20]
	Financial Plan																	
	I	II																
Equity	₹ 5,00,000	₹ 7,50,000																
Debt (cost of Debt @ 11%)	₹ 5,00,000	₹ 2,50,000																
TOTAL	₹ 10,00,000	₹ 10,00,000																
Q3CO-2; SO- Application of Time value of money ; BL- solve and Evaluate	a.	(i) The PQR Ltd required ₹ 10,00,000 plant expansion is to be financed as follows: The firm makes a 15% down payment and borrows the remainder at 8% interest rate. The loan is to be repaid in eight equal annual installments beginning four years from now. You are required to calculate:	[10/20]															

1. The amount of Loan to be taken.
2. The amount of Loan at the beginning of fourth year.
3. Calculate the size of the required annual loan payment.

(ii) Ms. Varsha has invested ₹ 67000 into deposit for 8 years. In the first two years the rate of interest is 9% p.a., in the next three years it is 8% p.a, in the next two years rate of interest increase to 9% and in the remaining phase rate of interest is 8% p.a. Calculate the amount accumulated by her after eight years.

b. The cost structure of Star Ltd is given below:

Particular	Cost per unit(₹)
Raw Material	25
Direct labour	10
Profit	12
Selling price	47

Additional information:

1. Cash balance required ₹ 250000
 2. Raw materials are held in stock for 2 months.
 3. Work-in-progress (assume 50% completion stage), will approximate to half a month's production.
 4. Finished goods remain in warehouse for 1 month.
 5. Suppliers of materials extend a 1 month credit and debtors are provided 2 month's credit.
 6. 185000 units of output for the year
- From the above mentioned information you are required to prepare working capital requirement.

[10/20]

a. Moon light Ltd has the following capital structure

Sources of funds	In Lakhs(₹)
Equity capital	4000
6% preference shares	1000
8% Debenture	3000
Total capital	8000

The market price of the company's share is ₹ 15. Currently the company is paying dividend of ₹ 3 per share, which will grow at 5% for ever. The tax rate may be presumed at 35%. You are required to calculate Weighted average cost of capital. What will be the pre tax cost of debt if the cost of equity is 20%.

[10/20]

CO-2; SO-Understanding the importance of credit period; BL- Evaluation of credit policies	b.	<p>Cool Ltd is making sales of ₹ 1550000 and it extends a credit of 90 days to its customers. However in order to overcome the financial difficulties, it is considering to change the credit policy. The proposed terms of credit and expected sales are given below</p> <table><tr><th>Policy</th><th>Terms</th><th>Sales</th></tr><tr><td>A</td><td>45 days</td><td>1536000</td></tr><tr><td>B</td><td>60 days</td><td>1560000</td></tr></table> <p>The Cool Ltd has a variable cost of 75% and fixed cost of ₹ 100000. The cost of capital is 12%. Evaluate different proposed policies and which policy should be adopted? (Assume 365 days in a year)</p>	Policy	Terms	Sales	A	45 days	1536000	B	60 days	1560000	[10/20]					
Policy	Terms	Sales															
A	45 days	1536000															
B	60 days	1560000															
Q5 CO-2; SO- Understanding of various techniques of capital budgeting; BL- Solve & Evaluate		<p>Cheetah Ltd. is assessing a project whose expected cash flows are as follows:</p> <table><tr><th>Year</th><th>Cash flows (Rs. In lakhs)</th></tr><tr><td>0</td><td>-2350</td></tr><tr><td>1</td><td>550</td></tr><tr><td>2</td><td>880</td></tr><tr><td>3</td><td>700</td></tr><tr><td>4</td><td>870</td></tr><tr><td>5</td><td>630</td></tr></table> <p>The cost of capital for Cheetah Ltd. is 13 percent.</p> <p>(i) What is the NPV of the project?</p> <p>(ii) What is the IRR of the project? If the IRR lies between 16% and 17%.</p> <p>(iii) What is MIRR if the reinvestment rate is 13%?</p> <p>(iv) What is the payback period?</p> <p>(v) What is the discounted payback period?</p>	Year	Cash flows (Rs. In lakhs)	0	-2350	1	550	2	880	3	700	4	870	5	630	[20]
Year	Cash flows (Rs. In lakhs)																
0	-2350																
1	550																
2	880																
3	700																
4	870																
5	630																
Q6 CO- 2; SO- Importance of working capital management; BL- Determining the factors impacting working capital	a.	<p>Explain working capital management and its determinants.</p>	[10/20]														
CO-2; SO- understanding dimensions of credit	b.	<p>Explain receivables management. State important dimensions of a firm's credit policy?</p>															

policy; BL- identifying the dimensions of receivables management																							
Q7 CO-1; SO-importance of financial management; BL- Understanding the role of finance manager in current scenario.	a.	Explain how the scope of finance function changed overtime. What role finance managers play in a modern finance?	[10/20]																				
CO-2; SO-preparation of cash budget; BL- creation of cash budget.	b.	<p>From the following information prepare cash budget for the two months ended June 2022</p> <p>Estimated Revenue and Expenditure:</p> <table><tr><th>Month</th><th>Total Sales</th><th>Material</th><th>Wages</th><th>Manufacturing overheads</th></tr><tr><td>April 22</td><td>320000</td><td>160000</td><td>75000</td><td>65000</td></tr><tr><td>May 22</td><td>250000</td><td>100000</td><td>57000</td><td>62000</td></tr><tr><td>June 22</td><td>400000</td><td>240000</td><td>99000</td><td>66000</td></tr></table> <p>1. Cash balance on 1st April^{May} 2022 was ₹ 50000.</p> <p>2. Interest on Investment of amount ₹ 20000 received in the month of May.</p> <p>3. Period of credit allowed by suppliers is 1 month.</p> <p>4. 40% of sales are in cash. Credit sales are received in the following month.</p> <p>5. Delay in payment of manufacturing overheads is 1 month.</p>	Month	Total Sales	Material	Wages	Manufacturing overheads	April 22	320000	160000	75000	65000	May 22	250000	100000	57000	62000	June 22	400000	240000	99000	66000	[10/20]
Month	Total Sales	Material	Wages	Manufacturing overheads																			
April 22	320000	160000	75000	65000																			
May 22	250000	100000	57000	62000																			
June 22	400000	240000	99000	66000																			