

Semester: Jan 24-	Apr 24	
Date: 27/03/2024  Duration: 10:30 PM to 01:	:30 PM	
	Class: FY	Semester/Trimester: III
	Name of the department/Sec	ction/Center: Finance and Law
	Name of the Course:	
	Date: 27/03/2024	Duration: 10:30 PM to 01:30 PM  Class: FY  Name of the department/Sec

Financial Management

## Instructions:

Question Number 1 is compulsory. Attempt any 4 of the remaining questions.

All subparts of the question must be solved together.

All workings must form part of the solution.

Make suitable assumptions wherever necessary.

Question No.				Max. Marks
1	The information below is taken from the records o	of two companies, A and B, in the same industry.		10
	Particulars	A Ltd	B Ltd	
	Plant and machinery	22,00,000	19,00,000	
	Inventories	14,80,000	10,35,000	
	Receivables	4,50,000	4,50,000	
	Cash	80,000	20,000	
	Total Assets	42,10,000	34,05,000	
	Equity Share Capital (face value Rs.10 each)	20,00,000	5,00,000	
	Retained earnings	11,80,000	4,85,000	
	Debentures	800,000	19,00,000	
	Trade creditors	2,30,000	5,20,000	
	Total Liabilities	42,10,000	34,05,000	

Particulars  A Ltd  ALM  Sides  ALM  ALM  ALM  ALM  ALM  ALM  ALM  AL							
Cost of goods sold  Other opening expenses  4.40,000  A \$5,000  Interest  72,000  2.28,000  The populse  1.00,400  Dividends  1.00,400  Credit sales amount to 100% of tood sides fire A Lid and 90% of total sales fire B Lid Calculate the relevant ratios to evaluate the performance of the two companies on parameters such as perfitability, liquidity, solvency, efficiency, and valuation from the distribution's prospective. The market price of equity shares for A Lid and 81 Lid is 8, 25 and 88, 311 respectively.  A company is considering an inventment in a new project to manufacture plantic better at a cost of 86.00 lids, which comprises inventment in reaching of the 40 lids and working capital if Re.20 lids. The project will be for 5 years, and annual sales are expected to be \$4,000 liberiles in the first year.  \$5000 bettles in the record and flind years and \$0,000 bettles in the shed and fourth years. The selling apprice and variable cost per buttle are expected to be constant at 86,100 and 86,60 respectively. Annual fixed costs for the project (cachading depositation) are entitlested at Re.180,000. Assume the company 80,000 and performent of deposition over the life of the assert. The reactions yhe as life of 5 years and no subsequently. Working capital in recovered in full at the end of the project. The next one is 55 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on in Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of capital storage even of capital capeced at the end of the project. The next one is 55 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on in Net Present Value.  Source of financing  Equiposite the and of the project. The next one is 55 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on in Net Present Value.  Source of financing  Equiposite the one of the project. Th		Particulars	A Ltd		B Ltd		
Other operating expenses 4,0000 45,5000 1228,000		Sales	44	4,00,000		57,00,000	
Enterest 72,000 223,000  Tax psychie 1,103,000 223,000  Dividends 1,315,040 51,870  Credit adea amount to 80% of total rules for A Lad and 90% of total sales for B Ltd. Calculate the relevant ratios to evaluate the performance of the two companies on parameters such as pollindrilly, liquidity, solvenay, efficiency, and valuation from the shareholders' perspective. The market price of equity shares for A Ltd and R Ltd in Rs. 26 and Rs. 31 respectively.  2 A company is considering an invotament in a new project to manufacture plants bottles at a cost of Rs. 40 lable, which comprises involutes in the first year, 25500 bottles in the second and third years and 60,000 bottles in the durid and fourth years. The selling price and variable cost per bottle are expected to be econtant at Rs. 100 and Rs. 60 respectively. Annual fixed costs for the project (reclading depreciation) are estimated at Rs. 180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and so subseque value. Working capital is recovered in fill at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth modertaking the project passed on its Net Porsent Value.  3 A company has on its books the following assumes of cach type of capital. The current price of capital of 15%, find out whether it is worth modertaking the project passed on its Net Porsent Value.  3 A company has on its books the following assumes of cach type of capital. The current market price of debentures is Rs. 80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weighted.  5 Source of financing Book value weighted.  5 Source of financing Capital (foce value Rs. 10 cach) 10,00,000  Retained entitings 200,000		Cost of goods sold	35	5,20,000		42,75,000	
Tax poyable 1,30,400 2,22,100  Dividends 1,30,400 51,870  Credit sales amount to 80% of botal sales for A Ltd and 90% of utal sales for B Ltd. Calculate the relevant ratios to evaluate the performance of the two companies on parameters such as profitability, logitality, solvency, efficiency, and valuation from the shareholders' perspective. The market price of equity shares for A Ltd and B Ltd is Re. 35 and Re. 311 respectively.  A company to considering an invocances in a new project to manufacture plastic bottles at a cost of Re. 60 halk, which comprises invocances in machinery of Re. 60 halk and working capital of Re. 20 halk. The project will be for 5 years, and annual sales are expected to be 50,000 bottles in the second and third years and 60,000 bottles in the third and fourth years. The selling proce and variable cost per bottle are expected to be constant at Re. 100 and Re. 60 expectively. Annual fixed costs for the project (excluding depreciation) are estimated at Re. 180,000. Assume the company for lower straight line method of depreciation over the life of the asser. The machinery has a life of 5 years and no salvage value. Working capital is recovered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project haved on its Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current proke of capital whites is Re. 50. Dividend expected at the end of next year is Re.5 and the dividends are expected to grow at 6% per year. Debentures matter after 5 years and will be redeemed at face value of Re. 100.  The current market price of debentures is Re.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Equipical Present Value.  Source of financing  Equipical Life value Re. 100 each)  119 Debentures (face value Re. 110 each)  119 Debentures (face value Re. 110 each)  119 Debentures (face value Re. 1		Other operating expenses	4	4,40,000		4,56,000	
Dividends  1,00,040  Credit sales amount to 80% of total sales for A Ltd and 90% of total sales for B Ltd. Calculate the relevant ratios to evaluate the performance of the two companies on parameters such as profitability, loguidity, solvency, efficiency, and valuation from the shareholders' perspective. The market price of equity shares for A Ltd and B Ltd is Ra.30 and Ra.311 respectively.  A company is considering an investment in a new project to manufacture plastic bottles at a cost of Ra.60 lakh, which comprises investment in machinery of Rs.40 lakh and working capital of Rs.20 lakh. The project will be for 5 years, and annual sales are expected to be 50,000 bottles in the first year, 55000 bottles in the second and hind years and 60,000 bottles in the third and fourth years. The selling price and variable cost per bottle are expected to be command at Ra.100 and Rs.60 respectively. Annual faced costs for the project (excluding depreciation) are estimated at Rs.180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no subruge value. Working capital is recovered in fall at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Nett Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of equity-shares is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Dehentures mature after 5 years and will be redocmed at face value of Rs.100.  The current macker price of debentures is Rs.50. Corporate tax rate is 35%. Determine the weighted towage cost of capital tasing book value weights.  Source of financing  Equity shares capital (face value Rs.10 each)  10,00,000  Retained carming  20,00,000		Interest		72,000		2,28,000	
Credit sales amount to 80% of total sales for A Ltd and 90% of total sales for B Ltd. Calculate the relevant ratios to evaluate the performance of the two companies on parameters such as profitability, legislity, solvency, efficiency, and valuation from the shareholders' perspective. The market price of equity shares for A Ltd and B Ltd is Rs.26 and Rs.31 respectively.  2 A company is considering an investment in a new project to manufacture plastic bottles at a cost of Rs.60 lakh, which comprises investment in machinery of Rs.40 lakh and working capital of Rs.20 lakh. The project will be for 5 years, and annual sales are expected to be 50,000 hortles in the second and third years and 60,000 bottles in the third and fourth years. The selling price and variable cost per bottle are expected to be constant at Rs.100 and Rs.60 respectively. Annual fixed costs for the project (excluding deprecision) are estimated at Rs.180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no salvage value. Working capital is resourcered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  3 A company has on its hooks the following amounts of each type of capital. The current price of equity whares is Rs.50. Dividend expected at the end of rext year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100. The current market price of deharmares is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.    Source of financing		Tax payable	1	1,10,400		2,22,300	
companies on parameters such as profitability, liquidity, solvency, efficiency, and valuation from the shareholders' perspective. The market price of equity shares for A Ltd and B Ltd is Rs. 26 and Rs. 311 respectively.  10  A company is considering an investment in a new project to manufacture plastic bottles at a cost of Rs. 60 labb, which comprises investment in machinery of Rs. 40 labb and working capital of Rs. 20 labb. The project will be for 5 years, and annual sales are expected to be \$0,000 bottles in the first year, 55000 bottles in the second and third years and 60,000 bottles in the third and fourth years. The selling price and variable cost per bottle are expected to be current and Rs. 100 and Rs. 60 respectively. Annual fixed costs for the project (exchaling depreciation) are estimated at Rs. 180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no subvage value. Working capital is recovered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs. 50. Dividend expected at the end of next year is Rs. 5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be reducened at face value of Rs. 100.  The current market price of debentures is Rs. 80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs. 100 each)  109.00000  Retined carnings  20,00,000  11% Debentures (face value Rs. 100 each)  5,00,000		Dividends	1	1,03,040		51,870	
A company has on its books the following amounts of each type of capital. The current price of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of capital where a fixe 50 years and will be redeemed at fixe value of Rs.100. The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.    Source of financing   Book value   Book va		Credit sales amount to 80% of total sales for A Ltd	l and 90% of total sales for B Ltd. Calcula	late the relev	ant ratios to ev	valuate the performance of the two	
A company is considering an investment in a new project to manufacture plastic bottles at a cost of Rs.60 lakh, which comprises investment in machinery of Rs.40 lakh and working capital of Rs.20 lakh. The project will be for 5 years, and annual sales are expected to be 50,000 bottles in the first year, 55000 bottles in the second and third years and 60,000 bottles in the third and fourth years. The selling price and variable cost per bottle are expected to be constant at Rs.100 and Rs.60 respectively. Annual fixed costs for the project (excluding depreciation) are entirated at Rs.180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no salvage value. Working capital is recovered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of capital where is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.100 each)  10,00,000  Retained earnings  20,00,000		companies on parameters such as profitability, liqu	uidity, solvency, efficiency, and valuation	n from the sh	hareholders' pe	erspective. The market price of eq-	
ery of Rs.40 lakh and working capital of Rs.20 lakh. The project will be for 5 years, and annual sales are expected to be 50,000 bottles in the first year,  55000 bottles in the second and third years and 60,000 bottles in the third and fourth years. The selling price and variable cost per bottle are expected to  be constant at Rs.100 and Rs.60 respectively. Annual fixed costs for the project (excluding depreciation) are estimated at Rs.180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no salvage value. Working capital is  recovered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the  project based on its Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs.50. Dividend expected at the end of  next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 cach)  10,00,000  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000		uity shares for A Ltd and B Ltd is Rs.26 and Rs.31	1 respectively.				
55000 bottles in the second and third years and 60,000 bottles in the third and fourth years. The selling price and variable cost per bottle are expected to be constant at Rs.100 and Rs.60 respectively. Annual fixed costs for the project (excluding depreciation) are estimated at Rs.180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no salvage value. Working capital is recovered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  10,00,000  Retained carnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000	2	A company is considering an investment in a new	project to manufacture plastic bottles at a	a cost of Rs.	.60 lakh, which	n comprises investment in machin-	10
be constant at Rs.100 and Rs.60 respectively. Annual fixed costs for the project (excluding depreciation) are estimated at Rs.180,000. Assume the company follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no salvage value. Working capital is recovered in fall at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  3 A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000		ery of Rs.40 lakh and working capital of Rs.20 lak	th. The project will be for 5 years, and an	nnual sales a	are expected to	be 50,000 bottles in the first year,	
pany follows straight line method of depreciation over the life of the asset. The machinery has a life of 5 years and no salvage value. Working capital is recovered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  Retained carnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000		55000 bottles in the second and third years and 60	,000 bottles in the third and fourth years.	The selling	price and varia	able cost per bottle are expected to	
recovered in full at the end of the project. The tax rate is 35 per cent. Assuming a cost of capital of 15%, find out whether it is worth undertaking the project based on its Net Present Value.  A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  10,00,000  Retained earnings  20,00,000  11% Debentures (face value Rs.100 cach)  5,00,000		be constant at Rs.100 and Rs.60 respectively. Ann	ual fixed costs for the project (excluding	depreciation	n) are estimated	d at Rs.180,000. Assume the com-	
A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000		pany follows straight line method of depreciation of	over the life of the asset. The machinery h	has a life of	5 years and no	salvage value. Working capital is	
A company has on its books the following amounts of each type of capital. The current price of equity shares is Rs.50. Dividend expected at the end of next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000		recovered in full at the end of the project. The tax	rate is 35 per cent. Assuming a cost of	capital of 15	5%, find out w	hether it is worth undertaking the	
next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000		project based on its Net Present Value.					
next year is Rs.5 and the dividends are expected to grow at 6% per year. Debentures mature after 5 years and will be redeemed at face value of Rs.100.  The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.  Source of financing  Book value  Equity share capital (face value Rs.10 each)  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000					p. s(	0.00	
The current market price of debentures is Rs.80. Corporate tax rate is 35%. Determine the weighted average cost of capital using book value weights.    Source of financing   Book value	3						10
Source of financing  Equity share capital (face value Rs.10 each)  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000							
Equity share capital (face value Rs.10 each)  Retained earnings  20,00,000  11% Debentures (face value Rs.100 each)  5,00,000		The current market price of debentures is Rs.80. Co	orporate tax rate is 35%. Determine the w	veighted aver	rage cost of cap	pital using book value weights.	
Retained earnings 20,00,000  11% Debentures (face value Rs.100 each) 5,00,000		Source of financing	F	Book value			
11% Debentures (face value Rs.100 each)  5,00,000		Equity share capital (face value Rs.10 each)			10,00,000		
		Retained earnings			20,00,000		
4 ABC Ltd is examining the question of relaxing its credit policy. It sells at present 25,000 units at a price of Rs. 100 per unit, the variable cost per unit is 10		11% Debentures (face value Rs.100 each)			5,00,000		
4 ABC Ltd is examining the question of relaxing its credit policy. It sells at present 25,000 units at a price of Rs. 100 per unit, the variable cost per unit is  10							
4 ABC Ltd is examining the question of relaxing its credit policy. It sells at present 25,000 units at a price of Rs. 100 per unit, the variable cost per unit is  10							
4 ABC Ltd is examining the question of relaxing its credit policy. It sells at present 25,000 units at a price of Rs. 100 per unit, the variable cost per unit is							
	4	ABC Ltd is examining the question of relaxing its	credit policy. It sells at present 25,000 ur	nits at a price	e of Rs. 100 pe	er unit, the variable cost per unit is	10
Rs. 80 and the average cost per unit at the current sales volume is Rs. 90. All the sales are on credit, the average collection period being 30 days. Collec -		Rs. 80 and the average cost per unit at the current s	sales volume is Rs. 90. All the sales are or	on credit, the	average collec	ction period being 30 days. Collec -	

	tion cost is Rs. 10,000 and bad debts are 1% of sales. A relaxed credit policy is expected to increase sales by 20 per cent and the average age of receiv -	
	ables to 60 days. Collection cost will increase to Rs. 30,000 and bad debt will be 2% of sales. Assuming a 15 percent return, should the firm relax its	
	credit policy? Assume 360 days in a year for calculation purposes.	
5 (a) 5 (b)	Mr. Joshi is about to retire at the age of 60. His employer has offered him 2 post-retirement options: (a) Rs.50 lakh lumpsum and (b) Rs.600,000 p.a. for	5
2 (2)	10 years. Assuming 10% interest, which option is better?	
	An investor deposits Rs.50,000 in a bank account for 5 years at 8% p.a. Find out the amount he will have if interest is compounded (a) annually (b) semi-	5
	annually and (c) quarterly.	3
6	Attempt ANY TWO from the following:	10
	(i) Describe the three broad areas of financial decision making.	
	(ii) Explain the various determinants of working capital.	
	(iii) Describe the different techniques of capital budgeting with their advantages and disadvantages.	

70 C	45	40	35	30	0 0	25	24	23	12	3	21	20	19	18	17	47	16	15	14	13	12	11	10	9	00	-	70	ח מ	יני	4	3	2	-		Year	
808	639	.6/2	./00	300	749	.780	.788	./50	705	803	.811	.820	.828	.000	000	844	.853	.861	.870	.879	.887	.896	.905	.914	.32.0	000	933	.942	.951	.961	.9/1	.900	.990	000	1%	
372	.410	.400	.000	500	.552	.610	.622	.000	634	.647	.660	.6/3	.000	.686	700	.714	.728	.743	.758	.1/3	.789	.804	.020	.000	837	853	.871	.888	.906	.924	.942	045	061	.980	2%	TO STATE OF THE
.228	.264	.00.	307	355	.412	.4/8	.432	100	.507	.522	.538	.001	554	570	.587	.605	.623	.642	.661	.001	./01	221.	700	744	766	.789	.813	.837	.863	.000	000	915	.943	.971	3%	
.141	.1/1	171	.208	.253	.308	.070	376	390	.406	.422	.400	120	456	.475	.494	.513	.534	.555	.5//	.00.	601	605	650	.676	.703	.731	.760	./90	220.	0000	855	.889	.925	.962	470	40/
.007	087	.111	.142	.181	.231	100	295	.310	.326	100	345	359	.377	.396	.416	.430	436	.40	481	505	.530	557	.585	.614	.645	.6//	./-	744	7/6	784	.823	.864	.907	.952	070	5%
	.054	.073	.097	.130	100	174	.233	.24/	202.	282	278	.294	.312	.331	.000	.070	371	394	.417	.442	.469	.497	.527	.558	.592	.027	607	282	705	.747	.792	.840	.890	.940	040	6%
	.034	.048	.00/	.00.	094	.131	.184	.13/	107	211	.226	.242	.258	122	700	996	.317	.339	.362	.388	.415	.444	.475	.508	.00	.000	582	623	.666	.713	.763	.010	.070	873	035	7%
	.021	.001	0,000	ako	.068	.099	.146		158	.170	.184	.199		2015	220	.250	.270	.292	.315	.340	.368	.397	.429	.400	163	500	.540	.583	.630	.681	./30	305	794	.857	.926	8%
The second secon	.013		001	032	.049	.075	.110	116	.126	.138	.150	.104	164	178	.194	.212	.231	.252	.275	.299	.326	.300	.000	388	422	.460	.502	.547	.596	.000	.700	708	772	.842	.917	9%
(Contd)	.000	000	.014	.022	.036	.00/	700.	090	.102	211.	.123	100	135	.149	.164	.180	.198	.210	.239	000	283	.000	319	350	.386	.424	.467	.513	.504	.02	621	683	.751	.826	.909	10/0

TABLE A-3 The Present Value of One Rupee (Contd.)

00	50	45	40	35	30	3 5	27.	24	23	22	21	20	19	18	77	16	15	14	5 2	7 7	3 -	1 2	10	0	0	57	6	5	4	ω	2	- A	
.000	200	.009	.015	.026	.044	.0/4	200.	080	.091	.101	.112	.124	.138	.153	.170	.188	.209	.232	.258	.286	.317	.002	300	.404	121	482	.535	.593	.659	.731	.812	.901	
.003	000	.006	.011	.019	.033	.059	.000	220	074	.083	.093	.104	.116	.130	.146	.163	.183	.205	.229	.257	.287	.322	.361	.404	204.	450	.507	.567	.636	.712	.797	.893	0/1
.002	.000	004	.008	.014	.026	.047	.053	.000	000	068	077	.087	.098	3.111	.125	.141	.160	.181	.204	.231	.261	.295	.333	.3/6	C24.	400	480	.543	.613	.693	.783	.885	10/0
.001	.000	000	200	.010	.020	.038	.043	.049	.000	056	0.67	073	.083	.095	.108	.123	.140	.160	.182	.208	.237	.270	.308	.351	.400	.400	450	510	592	675	.769	.877	1470
.001	200.	.000	004	.008	.015	.030	.035	.040	.046	.053	000-	061	070	081	.093	.107	.123	.141	.163	.187	.215	.247	.284	.327	.376	.432	.497	.372	.670	878	756	870	10%
.001	.001	.003	.000	300	012	.024	.028	.033	.038	.044	.001	.000	.000	060	080	093	108	125	145	.168	.195	.227	.263	.305	.354	.410	.4/6	.500	.041	641	743	288	76%
.000	.001	.002	.004	.003	000	000	.023	.027	.032	.037	.043	.051	900.	.008	.000	.093	005	111	130	150	.178	.208	.243	.285	.333	.390	.456	.534	.624	./31	.000	OFF	17%
000	.001	.001	.003	.007	200	016	019	.022	.026	.031	.037	.043	.051	.060	.071	.004	.084	.110	.10/	197	160	191	.225	.266	.314	.370	.437	.516	.609	./18	.84/	241	18%
000	.000	.001	.002	.005	.013	0.00	015	.018	.022	.026	.031	.037	.044	.052	.062	.0/4	.088	.104	.124	.140	1/10	176	909 000	249	296	.352	.419	.499	.593	.706	.840	0,00	19%
.000	000	.001	.002	.004	.010	.013	010	015	.018	.022	.026	.031	.038	.045	.054	.065	.078	.093	.112	.135	.102	160	104	55.5	270	.335	.402	.482	.579	.694	.833	20/0	* 7000

A-4 The Present Value of an Annuity of One Rupee

	40 000		13.606	15.046 15.456	16.3/4 17.159 17.774	19.793	23.115	27.356	32.835	40
9.8	10.881	12 108		15.046	17.159	19.793	23.115	27.356	32.835	40
9.7	10.757	11.925	12.332		16.3/4	10.000	21.401	CT.000	29.409	33
9.0	10.567	11.655	12.948	14.498	40014	18 665	21 /87	24 999	20 400	200
9.	10.274	11.258	12.409	13.765	15.373	17.292	19.601	22.397	25.808	30
9.	9.823	10.675	11.654	12.783	14.094	15.622	17.413	19.524	22.023	25
8.	9.707	10.529	11.469	12.550	13.799	15.247	16.936	18.914	21.244	24
.00	9.580	10.371	11.272	12.303	13.489	14.857	16.444	18.292	20.456	23
.00	9.442	10.201	11.061	12.042	13.163	14.451	15.937	17.658	19.661	22
8.	9.292	10.017	10.836	11.764	12.821	14.029	15.415	17.011	18.857	21
00	9.129	9.818	10.594	11.470	12.462	13.590	14.878	16.352	18.046	20
00	8.950	9.604	10.336	11.158	12.085	13.134	14.324	15.679	17.226	19
8.	8.756	9.372	10.059	10.828	11.690	12.659	13.754	14.992	16.398	18
8.0	8.544	9.122	9.763	10.477	11.274	12.166	13.166	14.292	15.562	17
7.1	8.313	8.851	9.447	10.106	10.838	11.652	12.561	13.578	14.718	16
7.1	8.061	8.560	9.108	9.712	10.380	11.118	11.938	12.849	13.865	15
7.:	7.786	8.244	8.746	9.295	9.899	10.563	11.296	12.106	13.004	14
7.	7.487	7.904	8.358	8.853	9.394	9.986	10.635	11.348	12.134	13
6.1	7.161	7.536	7.943	8.384	8.863	9.385	9.954	10.575	11.255	12
6.4	6.805	7.139	7.499	7.887	8.306	8.760	9.253	9.787	10.368	11
6.	6.418	6.710	7.024	7.360	7.722	8.111	8.530	8.983	9.471	10
5	5.995	6.247	6.515	6.802	7.108	7.435	7.786	8.162	8.566	9
5.0	5.535	5.747	5.971	6.210	6.463	6.733	7.020	7.326	7.652	8
4.8	5.033	5.206	5.389	5.582	5.786	6.002	6.230	6.472	6.728	7
4.	4.486	4.623	4.767	4.917	5.076	5.242	5.417	5.601	5.795	6
3.7	3.890	3.993	4.100	4.212	4.329	4.452	4.580	4.713	4.853	5
3	3.240	3.312	3.387	3.465	3.546	3.630	3.717	3.808	3.902	4
2.487	2.531	2.577	2.624	2.673	2.723	2.775	2.829	2.884	2.941	ω
1.5	1.759	1.783	1.808	1.833	1.859	1.886	1.913	1.942	1.970	2
.909	.917	.926	.935	.943	.952	.962	.971	.980	.990	24 12 25
10%	9%	8%	7%	6%	5%	4%	3%	2%	1%	Year

TABLE A-4 The Present Value of an Annuity of One Rupee (Contd.)

	1011	100/	130%	14%	15%	16%	17%	18%	19%	20%*
Year	311%	3 1270	10/0	100	010	080	855	.847	.850	.833
44	.901	893	.885	.877	0/8.	1 505	1 585	1.566	1.547	1.528
0	1.713	1.690	1.668	1.647	1.626	1.603	0.000	2 174	2.140	2.106
1 0	2.444	2.402	2.361	2.322	2.283	2.240	2.210	2 690	2.639	2.589
0 5	3 100	3.037	2.974	2.914	2.855	2.798	2.743	2 107	3.058	2.991
1 1	201.0	3 605	3.517	3.433	3.352	3.274	3.199	3.121	0.000	3 326
2	3.090	2.000	3 998	3.889	3.784	3.685	3.589	3.498	3.410	2.020
9	4.231	4.11	0.00	A 288	4 160	4.039	3.922	3.812	3.700	3.003
7	4.712		4.423	7.500	787	4 344	4.207	4.078	3.954	3.83/
8	5.146	4.968	4.799	4.039	4.407	4 607	4 451	4.303	4.163	4.031
6	5.537	5.328	5.132	4.946	21.7	1000	4 659	4.494	4.339	4.192
10	5.889	5.650	5.426	5.216	5.019	600.4	A 836	4 656	4.487	4.327
7 -	6 207	5.938	5.687	5.453	5.234	5.029	4.000	A 703	4611	4.439
	6 492	6.194	5.918	5.660	5.421	5.197	4.300	4 010	4715	4.533
7 0	6.750	6 424	6.122	5.842	5.583	5.342	5.118	0.000	V 802	4611
13	00.730	25.0	5 303	6.002	5.724	5.468	5.229	5.008	4.002	A 67E
14	6.982	0.020	0.000	6 142	5.847	5.575	5.324	5.092	4.8/6	4.073
15	7.191	6.811	0.402	7000	5 954	5.669	5.405	5.162	4.938	4.730
16	7.379	6.974	6.604	0.203	7770	5 749	5.475	5.222	4.990	4.775
17	7.549	7.120	6.729	6.3/3	0.047	010	5 534	5.273	5.033	4.812
2	7.702	7.250	6.840	6.467	6.128	0.010	7 585	5.316	5.070	4.843
10	7 839	7.366	6.938	6.550	6.198	0.00	2.202	5 353	5.101	4.870
00	7 963	7.469	7.024	6.623	6.259	5.929	3.020	5 384	5 127	4.891
2 4 6	B 075	7 562	7.102	6.687	6.312	5.973	2,000	0.00	5 149	4 909
17	0.073	7 645	7 170	6.743	6.359	6.011	5.696	5.410	5.143	4 925
77	0.170	7 7 18	7 230	6.792	6.399	6.044	6.723	5.432	2.107	A 037
23	8.266	1.710	1.500	2888	6 434	6.073	5.747	5.451	291.6	4.90
24	8.348	7.784	7.283	0.000	6.164	6.097	5.766	5.467	5.195	4.948
25	8.422	7.843	7.330	0.8/3	9910	6 177	5.829	5.517	5.235	4.979
30	8.694	8.055	7.496	7.003	0.000	A 215	5 858	5.539	5.251	4.992
35	8.855	8.176	7.586	7.070	0.017	6.213	5 871	5.548	5.258	4.997
40	8.951	8.244	7.634	7.105	0.042	6.233	5.877	5.552	5.261	4.999
45	800.6	8.283	7.661	7.123	6.654	0.242	5 880	5.554	5.262	4.999
50	9.042	8.305	7.675	7.133	6.661	0.240	0000			
					The state of the s			achiain mhho onh/han siain se	Significa	

\*For present value of annuity at rates between 21% and 40%, refer to website. The address is: www.mhhe.com/khan&jain5e