PART II : FINANCIAL MANAGEMENT

1. Answer the following, supporting the same with reasoning/working notes:

   (a) All of the following statements in regard to working capital are correct except

   (i) Current liabilities are an important source of financing for many small firms.

   (ii) Profitability varies inversely with liquidity.

   (iii) The hedging approach to financing involves matching maturities of debt with specific financing needs.

   (iv) Financing permanent inventory buildup with long-term debt is an example of an aggressive working capital policy.

   (b) Royal Sporting Company has Rs. 50 lakhs in inventory and Rs. 20 lakhs in accounts receivable. Its average daily sales is Rs. 1,00,000. The company's payables deferral period is 30 days. You are required to calculate the length of the company's cash conversion period?

   (c) Anand Toys maintains a separate account for cash disbursement. Total disbursements are Rs. 2,62,500 per month. Administrative and transaction cost of transferring cash to disbursement account is Rs. 25 per transfer. Marketable securities yield is 7.5% per annum. Determine the optimum cash balance according to William J Baumol model.

   (d) Which of the following is an advantage of debt financing?

   (i) Interest and principal obligations must be paid regardless of the economic position of the firm.

   (ii) Debt agreements contain covenants.

   (iii) The obligation is generally fixed in terms of interest and principal payments.

   (iv) Excessive debt increases the risk of equity holders and therefore depresses share prices.

   (e) Assume that a company is expected to pay a dividend of Rs. 5.00 per share this year. The company along with the dividend is expected to grow at a rate of 6%. If the current market price of the share is Rs. 60 per share, calculate the estimated cost of equity?

Working Capital Management

2. (a) The following information relates to material "A" that is used by Gamma Company:

Annual usage in units	20,000
Working days per year	250
Safety stock in units	800
Normal lead time in working days	30

The units of the material "A" will be required evenly throughout the year. Compute the order point.

(b) If Peta Company's terms of trade are 3/10, net 45 with a particular supplier, then calculate the cost on an annual basis of not taking the discount? Assume a 360-day year.

Investment Decisions

3. (a) Zion Limited is planning for the purchase of a machine that would cost Rs. 1,00,000 with the expectation that Rs. 20,000 per year could be saved in after-tax cash costs if the machine was acquired. The machine's estimated useful life is ten years, with no residual value, and would be depreciated by the straight-line method. You are required to calculate the payback period.

(b) Equipment A has a cost of Rs. 75,000 and net cash flow of Rs. 20,000 per year for six years. A substitute equipment B would cost Rs. 50,000 and generate net cash flow of Rs. 14,000 per year for six years. The required rate of return of both equipments is 11 per cent. Calculate the IRR and NPV for the equipments. Which equipment should be accepted and why?

Financing Decisions

4. Bestvision Company requires Rs. 10,00,000 of financing and is considering two options as given under:

Options	Amount of Equity Raised (Rs.)	Amount of Debt Financing (Rs.)	Before–tax Cost of Debt (per annum)
A	7,00,000	3,00,000	8%
B	3,00,000	7,00,000	10%

In the first year of operations, the company is expected to have sales revenues of Rs. 5,00,000; cost of sales of Rs. 2,00,000; and general and administrative expenses of Rs. 1,00,000. The tax rate is 30%. All earnings are paid out as dividends at year end.

You are required to calculate:

(a) The weighted average cost of capital under option A, if the cost of equity is 12%.

(b) The return on equity and the debt ratio under the two options.

Financial Analysis and Planning

5. The following accounting information and financial ratios of Mahurat Limited relate to the year ended 31st December, 2008:

		2008
I	Accounting Information:	
	Gross Profit	15% of Sales
	Net profit	8% of sales
	Raw materials consumed	20% of works cost

	Direct wages	10% of works cost
	Stock of raw materials	3 months' usage
	Stock of finished goods	6% of works cost
	Debt collection period	60 days
	All sales are on credit	
II	Financial Ratios:	
	Fixed assets to sales	1 : 3
	Fixed assets to Current assets	13 : 11
	Current ratio	2 : 1
	Long-term loans to Current liabilities	2 : 1
	Capital to Reserves and Surplus	1 : 4

If value of fixed assets as on 31st December, 2007 amounted to Rs. 26 lakhs, you are required to prepare a summarised Profit and Loss Account of the company for the year ended 31st December, 2008 and also the Balance Sheet as on 31st December, 2008.

Investment Decisions

6. Zubair Electronics is considering the proposal of taking up a new project which requires an investment of Rs. 400 lakhs on machinery and other assets. The project is expected to yield the following earnings (before depreciation and taxes) over the next five years:

Year	Earnings (Rs. in lakhs)
1	160
2	160
3	180
4	180
5	150

The cost of raising the additional capital is 12% and assets have to be depreciated at 20% on 'Written Down Value' basis. The scrap value at the end of the five years' period may be taken as zero. Income-tax applicable to the company is 50%.

You are required to calculate the net present value of the project and advise the management to take appropriate decision. Also calculate the Internal Rate of Return of the Project.

Note: Present value of Re. 1 at different rates of interest is as follows:

Year	10%	12%	14%	16%
1	0.91	0.89	0.88	0.86
2	0.83	0.80	0.77	0.74
3	0.75	0.71	0.67	0.64

4	0.68	0.64	0.59	0.55
5	0.62	0.57	0.52	0.48

Financing Decisions

7. Vishwabharati Limited has the following book value capital structure:

Equity Capital (in shares of Rs. 10 each, fully paid up - at par)	Rs. 15 crores
11% Preference Capital (in shares of Rs. 100 each, fully paid up - at par)	Rs. 1 crore
Retained Earnings	Rs. 20 crores
13.5% Debentures (of Rs. 100 each)	Rs. 10 crores
15% Term Loans	Rs. 12.5 crores

The next expected dividend on equity shares per share is Rs. 3.60; the dividend per share is expected to grow at the rate of 7%. The market price per share is Rs. 40. Preference share, redeemable after ten years, is currently selling at Rs. 75 per share. Debentures, redeemable after six years, are selling at Rs. 80 per debenture. The Income tax rate for the company is 40%.

You are required to calculate the weighted average cost of capital using:

(a) Book value proportions; and

(b) Market value proportions.

Financial Analysis and Planning

8. Housestores Limited
Consolidated Balance Sheets

Amounts in lakhs, except per share data	February 2, 2009	February 2, 2008
	Rs.	Rs.
Assets		
Current Assets:		
Cash and Cash equivalents	2,188	2,477
Short-term investments, including current maturities of long-term investments	65	69
Receivables, net	1,072	920
Merchandise inventories	8,338	6,725

Other current assets	254	170
Total current assets	11,917	10,361
Property and equipment, at cost:		
Land	5,560	4,972
Buildings	9,197	7,698
Furniture, fixtures and equipment	4,074	3,403
Leasehold improvements	872	750
Construction in progress	724	1,049
Capital leases	306	257
	20,733	18,129
Less: Accumulated depreciation and amortization	3,565	2,754
Net property and equipment	17,168	15,375
Notes receivable	107	83
Cost in excess of the fair value of net assets acquired, net of accumulated amortisation of Rs. 50 at February 2, 2009, and Rs. 49 at February 3, 2008	575	419
Other assets	244	156
Total assets	30,011	26,394
Liabilities and Shareholders' Equity		
Current Liabilities:		
Accounts payable	4,560	3,436
Accrued salaries and related expenses	809	717
Sales taxes payable	307	348
Deferred revenue	998	851
Income taxes payable	227	211
Other accrued expenses	1,134	938
Total current liabilities	8,035	6,501
Long-term debt, excluding current installments	1,321	1,250
Other long-term liabilities	491	372
Deferred income taxes	362	189

Total liabilities	10,209	8,312
Shareholders' Equity		
Equity shares, par value Rs. 0.05; authorized: 10,000 shares, issued and outstanding 2,362 shares at February 3, 2009, and 2,346 shares at February 3, 2008	118	117
Paid-in capital	5,858	5,412
Retained earnings	15,971	12,799
Accumulated other comprehensive loss	(82)	(220)
Unearned compensation	(63)	(26)
Treasury stock, at cost, 69 shares at February 2, 2009	(2,000)	–
Total shareholders' equity	19,802	18,082
Total liabilities and shareholders' equity	30,011	26,394

Housestores Limited
Consolidated Statements of Earnings

	Year Ended		
	February 2, 2009	February3, 2008	January 28, 2007
Amounts in lakhs, except per share data			
Net Sales	Rs. 58,247	Rs. 53,553	Rs. 45,738
Cost of merchandise sold	40,139	37,406	32,057
Gross profit	18,108	16,147	13,681
Operating expenses:			
Selling and store operating	11,180	10,163	8,513
Pre-opening	96	117	142
General and administrative	1,002	935	835
Total operating expenses	12,278	11,215	9,490
Operating income	5,830	4,932	4,191
Interest income (expense):			
Interest and investment income	79	53	47

Interest expense	(37)	(28)	(21)
Interest, net	42	25	26
Earnings before provision for income taxes	5,872	4,957	4,217
Provision for income taxes	2,208	1,913	1,636
Net earnings	Rs. 3,664	Rs. 3,044	Rs. 2,581
Weighted-average equity shares	2,336	2,335	2,315
Basic earnings per share	Rs. 1.57	Rs. 1.30	Rs. 1.11
Diluted weighted-average equity shares	2,344	2,353	2,352
Diluted earnings per share	Rs. 1.56	Rs. 1.29	Rs. 1.10

You are required to calculate:

(a) Profitability Ratios

(b) Activity Ratios

(c) Liquidity Ratios

(d) Debt Utilisation Ratios

(e) Market Ratios.

Financial Analysis and Planning

9. The following financial statements relate to Thermox Limited:

Balance Sheet as on

	March 31, 2009	March 31, 2008
	Rs.	Rs.
Capital and Liabilities:		
Share capital, Rs. 10 par value	1,67,500	1,50,000
Share premium	3,35,000	2,37,500
Reserves and Surplus	1,74,300	1,23,250
Debentures	2,40,000	–
Long-term loans	40,000	50,000
Creditors	28,800	27,100
Bank Overdraft	7,500	6,250
Accrued expenses	4,350	4,600
Income-tax payable	48,250	16,850
	10,45,700	6,15,550

	March 31, 2009	March 31, 2008
	Rs.	Rs.
Assets:		
Land	3,600	3,600
Building, net of depreciation	6,01,800	1,78,400
Machinery, net of depreciation	1,10,850	1,07,050
Investment in 'A' Ltd.	75,000	–
Stock	58,800	46,150
Prepaid expenses	1,900	2,300
Debtors	76,350	77,150
Trade Investments	40,000	1,05,000
Cash	77,400	95,900
	10,45,700	6,15,550

Income Statement

for the year ended March 31, 2009

	Rs.
Net Sales	13,50,000
Less: Cost of goods sold and operating expenses (including depreciation on buildings of Rs. 6,600 and depreciation on machinery of Rs. 11,400)	12,58,950
Net operating profit	91,050
Gain on sale of trade investments	6,400
Gain on sale of machinery	1,850
Profits before tax	99,300
Income-tax	48,250
Profits after tax	51,050

Additional information:

(i) Machinery with a net book value of Rs. 9,150 was sold during the year.

(ii) The shares of 'A' Ltd. were acquired by issue of debentures.

You are required to prepare a Funds Flow Statement (Statement of Changes in Financial Position on Working capital basis) for the year ended March 31, 2009.

Time Value of Money

10. (a) Mr. Pinto borrowed Rs. 1,00,000 from a bank on a one-year 8% term loan, with interest compounded quarterly. Determine the effective annual interest on the loan?

(b) Suppose Adit has borrowed a 3-year loan of Rs. 10,000 at 9 per cent from his employer to buy a motorcycle. If his employer requires three equal end-of-year repayments, then calculate the annual instalment.

Working Capital Management

11. (a) Konika Electronics has total sales of Rs. 3.2 crores and its average collection period is 90 days. The past experience indicates that bad-debt losses are 1.5% on sales. The expenditure incurred by the company in administering its receivable collection efforts are Rs. 5,00,000. A factor is prepared to buy the company's receivables by charging 2% commission. The factor will pay advance on receivables to Konika Electronics at an interest rate of 18% p.a. after withholding 10% as reserve. You are required to compute the effective cost of factoring to Konika Electronics.

(b) Vijaylaxmi Limited, a newly formed company, has applied to a commercial bank for the first time for financing its working capital requirements. The following information is available about the projections for the current year:

Estimated level of activity: 1,04,000 completed units of production plus 4,000 units of work-in-progress. Based on the above activity, estimated cost per unit is:

Raw material	Rs. 80 per unit
Direct wages	Rs. 30 per unit
Overheads (exclusive of depreciation)	Rs. 60 per unit
Total cost	Rs. 170 per unit
Selling price	Rs. 200 per unit

Raw materials in stock: Average 4 weeks consumption, work-in-progress (assume 50% completion stage in respect of conversion cost) (materials issued at the start of the processing).

Finished goods in stock	8,000 units
Credit allowed by suppliers	Average 4 weeks
Credit allowed to debtors/receivables	Average 8 weeks
Lag in payment of wages	Average $1\frac{1}{2}$ weeks

Cash at banks (for smooth operation) is expected to be Rs. 25,000.

Assume that production is carried on evenly throughout the year (52 weeks) and wages and overheads accrue similarly. All sales are on credit basis only.

You are required to determine:

(i) The net working capital required;

(ii) The maximum permissible bank finance under first and second methods of financing as per Tandon Committee Norms.

12. Differentiate between the following:
    (a) Traditional Phase and Modern Phase of Financial Management
    (b) Liquidity Ratios and Activity Ratios
    (c) Debt Financing and Equity Financing
    (d) Financial Lease and Operating Lease.
13. Write short notes on the following:
    (a) Role of Chief Financial Officer (CFO)
    (b) Composition of ROE using Du Pont
    (c) Trading on Equity
    (d) External Commercial Borrowings (ECBs).

SUGGESTED ANSWERS/HINTS

1. (a) The requirement is to determine the false statement regarding working capital management. Answer (iv) is correct because financing permanent inventory buildup with long-term debt is an example of a conservative working capital policy. Answers (i), (ii), and (iii) are all accurate statements about working capital management.

   (b) Calculation of the Conversion Cycle

   Cash Conversion Period = Inventory Conversion Period + Receivables Collection Period – Payable Deferral Period

   Inventory Conversion Period = Rs. 50,00,000/Rs. 100,000 = 50 days

   Receivable Conversion Period = Rs. 20,00,000 / Rs. 100,000 = 20 days.

   Therefore, Cash Conversion Cycle = 50 days + 20 days – 30 days = 40 days

   (c) Determination of Optimal Cash Balance according to William J. Baumol Model

   The formula for determining optimum cash balance is:

$$C = \sqrt{\frac{2U \times P}{S}}$$

   Where,

   C = Optimum cash balance

   U = Annual (or monthly) cash disbursement

   P = Fixed cost per transaction.

   S = Opportunity cost of one rupee p.a. (or p.m.)

$$C = \sqrt{\frac{2 \times 2,62,500 \times 12 \times 25}{0.075}}$$

$$= \sqrt{\frac{15,75,00,000}{0.075}}$$

$$= \sqrt{2,10,00,00,000}$$

Optimum cash balance, C, = Rs. 45,826

(d) The requirement is to identify the advantages of debt financing. Answer (iii) is correct because the fixed obligation of interest and principal is an advantage to debt financing. Answers (i), (ii), and (iv) are incorrect because they are all disadvantages of debt financing.

(e) Calculation of Estimated Cost of Equity using Dividend-yield-plus-growth-rate Approach

Estimated cost of equity = (Dividend / Price of the Share) + Growth rate

= [(Rs. 5 ÷ Rs. 60) + 6%]

= 14.3%

2. (a) Determination of Order Point for Material A

When safety stock is maintained, the order point is computed as follows:

Order Point = Daily demand × Lead time in days + Safety stock

Daily demand = 20,000 units ÷ 250 days

= 80 units

Order Point = [(80 × 30) + 800]

= 3,200 units

(b) Calculation of Cost of Not taking a Trade Discount

The formula for computing the interest is as under :

$$\text{Interest} = \frac{\text{Discount percent}}{100\% - \text{Discount percent}} \times \frac{360 \text{ days}}{\text{Total pay period} - \text{Discount period}}$$

$$= \frac{3\%}{100\% - 3\%} \times \frac{360 \text{ days}}{45 \text{ days} - 10 \text{ days}} = 31.81\%$$

Cost of Not taking a Trade Discount = 31.81%

3. (a) Calculation of Payback Period

The payback method evaluates investments on the length of time until total amount invested are recouped in the form of cash inflows or cash outflows avoided.

Payback Period = Initial investment ÷ Annual cash inflow of a project

= Rs. 100,000 ÷ Rs. 20,000

= 5 years.

(b) Calculation of Net Present Value (NPV) and Internal Rate of Return (IRR) for Equipment A and Equipment B

Equipment A:

NPV = 20,000 × $PVAF_{6,0.11}$ – 75,000

= 20,000 × 4.231 – 75,000

= 84,620 – 75,000 = Rs. 9,620

IRR = 20,000 × $PVAF_{6,r}$ = 75,000

$PVAF_{6,r}$ = 75,000 / 20,000 = 3.75

From the present value of an annuity table, we find:

$PVAF_{6,0.15}$ = 3.784

$PVAF_{6,0.16}$ = 3.685

Therefore, $IRR = r = 0.15 + 0.01\left[\frac{3.784 - 3.75}{3.784 - 3.685}\right]$

= 0.15 + 0.0034

= 0.1534 or 15.34%.

Equipment B:

NPV = 14,000 × $PVAF_{6,0.11}$ – 50,000

= 14,000 × 4.231 – 50,000

= 59,234 – 50,000 = Rs. 9,234

IRR = 14,000 × $PVAF_{6,r}$ = 50,000

$PVAF_{6,r}$ = 50,000/14,000 = 3.571

From the present value of an annuity table, we find:

$PVAF_{6,0.17}$ = 3.589

$PVAF_{6,0.18}$ = 3.498

Therefore, $IRR = r = 0.17 + 0.01\left[\frac{3.589 - 3.571}{3.589 - 3.498}\right]$

= 0.17 + 0.002 = 0.172 or 17.20%.

Recommendation: Equipment A has a higher NPV but lower IRR as compared to Equipment B. Therefore, Equipment A should be preferred since the wealth of the shareholders will be maximized.

4. (a) Calculation of Weighted Average Cost of Capital (WACC)

WACC = (Weight of equity) × (Cost of equity) + (Weight of debt) × (Before-tax cost of debt) × (1 - Tax rate)

= (0.7) × (0.12) + (0.3) × (0.08) × (1 - 0.3)

= 0.084 + 0.0168 = 0.1008 = 10.08%.

(b) Calculation of Return on Equity (ROE) and Debt Ratio

Return on Equity = Net Income ÷ Amount of Equity Invested

Debt Ratio = Amount of Debt Financing ÷ Total Assets

Calculations of the Two Ratios for Both Financing Arrangements

	Option A	Option B
Sales revenue	Rs. 5,00,000	Rs. 5,00,000
Cost of sales	2,00,000	2,00,000
General & administrative expense	1,00,000	1,00,000
Interest expenses	24,000	70,000
Taxable income	Rs.1,76,000	Rs.1,30,000
Tax payable (30%)	52,800	39,000
Net income	Rs.1,23,200	Rs.91,000
Equity invested	7,00,000	3,00,000
	1,23,200	91,000
Return on Equity	7,00,000	3,00,000
	= 17.6%	= 30.3%
	3,00,000	7,00,000
Debt Ratio	10,00,000	10,00,000
	= 0.3	= 0.7

5. (a) Working Notes:

(i) Calculation of Sales

$$\frac{\text{Fixed Assets}}{\text{Sales}} = \frac{1}{3}$$

$$\therefore \frac{26,00,000}{\text{Sales}} = \frac{1}{3} \Rightarrow \text{Sales} = \text{Rs.}78,00,000$$

(ii) Calculation of Current Assets

$$\frac{\text{Fixed Assets}}{\text{Current Assets}} = \frac{13}{11}$$

$$\therefore \frac{26,00,000}{\text{Current Assets}} = \frac{13}{11} \Rightarrow \text{Current Assets} = \text{Rs. } 22,00,000$$

(iii) Calculation of Raw Material Consumption and Direct Wages

		Rs.
Sales		78,00,000
Less: Gross Profit		11,70,000
Works Cost		66,30,000
Raw Material Consumption (20% of Works Cost)	Rs. 13,26,000	
Direct Wages (10% of Works Cost)	Rs. 6,63,000	

(iv) Calculation of Stock of Raw Materials (= 3 months usage)

$$= 13,26,000 \times \frac{3}{12} = \text{Rs. } 3,31,500$$

(v) Calculation of Stock of Finished Goods (= 6% of Works Cost)

$$= 66,30,000 \times \frac{6}{100} = \text{Rs. } 3,97,800$$

(vi) Calculation of Current Liabilities

$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = 2$$

$$\frac{22,00,000}{\text{Current Liabilities}} = 2 \Rightarrow \text{Current Liabilities} = \text{Rs. } 11,00,000$$

(vii) Calculation of Debtors

$$\text{Average Collection Period} = \frac{\text{Debtors}}{\text{Credit Sales}} \times 365$$

$$\frac{\text{Debtors}}{78,00,000} \times 365 = 60 \Rightarrow \text{Debtors} = \text{Rs. } 12,82,191.78 \text{ or Rs. } 12,82,192$$

(viii) Calculation of Long term Loan

$$\frac{\text{Long term Loan}}{\text{Current Liabilities}} = \frac{2}{1}$$

$$\frac{\text{Long term loan}}{11,00,000} = \frac{2}{1} \Rightarrow \text{Long term loan} = \text{Rs. } 22,00,000.$$

(ix) Calculation of Cash Balance

		Rs.
Current Assets		22,00,000
Less: Debtors	12,82,192	
Raw materials stock	3,31,500	
Finished goods stock	3,97,800	20,11,492
Cash balance		1,88,508

(x) Calculation of Net worth

Fixed Assets		26,00,000
Current Assets		22,00,000
Total Assets		48,00,000
Less: Long term Loan	22,00,000	
Current Liabilities	11,00,000	33,00,000
Net worth		15,00,000

Net worth = Share capital + Reserves = 15,00,000

$$\frac{\text{Capital}}{\text{Reserves and Surplus}} = \frac{1}{4} \Rightarrow \text{Share Capital} = 15,00,000 \times \frac{1}{5} = \text{Rs. } 3,00,000$$

$$\text{Reserves and Surplus} = 15,00,000 \times \frac{4}{5} = \text{Rs. } 12,00,000$$

Profit and Loss Account of Mahurat Limited
for the year ended 31st December, 2008

	Particulars	Rs.	Particulars	Rs.
To	Direct Materials	13,26,000	By Sales	78,00,000
To	Direct Wages	6,63,000		
To	Works (Overhead) Balancing figure	46,41,000		
To	Gross Profit c/d (15% of Sales)	11,70,000		
		78,00,000		78,00,000
To	Selling and Distribution Expenses (Balancing figure)	5,46,000	By Gross Profit b/d	11,70,000
To	Net Profit (8% of Sales)	6,24,000		
		11,70,000		11,70,000

Balance Sheet of Mahurat Limited
as on 31st December, 2008

Liabilities	Rs.	Assets	Rs.
Share Capital	3,00,000	Fixed Assets	26,00,000
Reserves and Surplus	12,00,000	Current Assets:	
Long term loans	22,00,000	Stock of Raw Material	3,31,500
Current liabilities	11,00,000	Stock of Finished Goods	3,97,800
		Debtors	12,82,192
		Cash	1,88,508
	48,00,000		48,00,000

6. (i) Calculation of Net Cash Flow

(Rs. in lakhs)

Year	Profit before dep. and tax	Depreciation (20% on WDV)	PBT	PAT	Net cash flow
(1)	(2)	(3)	(4)	(5)	(3) + (5)
1	160	400 × 20% = 80	80	40	120
2	160	(400 – 80)× 20% = 64	96	48	112
3	180	(320 – 64)× 20% = 51.2	128.8	64.4	115.6
4	180	(256 – 51.2)× 20% = 40.96	139.04	69.52	110.48
5	150	(204.8 – 40.96) = 163.84*	–13.84	–6.92	156.92

*including depreciation and loss on disposal of assets.

(ii) Calculation of Net Present Value (NPV)

(Rs. in lakhs)

Year	Net Cash Flow	12%		14%		16%	
		D.F	P.V	D.F	P.V	D.F	P.V
1	120	.89	106.8	.88	105.60	.86	103.2
2	112	.80	89.6	.77	86.24	.74	82.88
3	115.6	.71	82.08	.67	77.45	.64	73.98
4	110.48	.64	70.70	.59	65.18	.55	60.76
5	156.92	.57	89.44	.52	81.60	.48	75.32
			438.62		416.07		396.14

Less: Initial Investment	400.00	400.00	400.00
NPV	38.62	16.07	(3.86)

(iii) Advise: Since Net Present Value of the project is maximum at 12% = 38.62 lakhs, therefore the project should be implemented.

(iv) Calculation of Internal Rate of Return (IRR)

$$IRR = 14\% + \frac{16.07 \times 2\%}{16.07 - (-3.86)}$$

$$= 14\% + \frac{32.14}{19.93}$$

= 14% + 1.61% = 15.61%.

7. (a) Statement showing Computation of Weighted Average Cost of Capital by using Book Value Proportions

Source of Finance	Amount (Book value) (Rs. in crores)	Weight (Book value proportion)	Cost of Capital	Weighted Cost of Capital
		(a)	(b)	(c)= (a)x(b)
Equity capital	15	0.256	0.16 (Refer to working note 1)	0.04096
11% Preference capital	1	0.017	0.1543 (Refer to working note 2)	0.00262
Retained earnings	20	0.342	0.16 (Refer to working note 1)	0.05472
13.5% Debentures	10	0.171	0.127 (Refer to working note 3)	0.02171
15% term loans	12.5	0.214	0.09 (Refer to working note 4)	0.01926
	58.5	1.00		0.013927
Weighted Average Cost of Capital				13.93%

(b) Statement showing Computation of Weighted Average Cost of Capital by using Market Value Proportions

Source of Finance	Amount (Rs. in crores)	Weight (Market value proportions)	Cost of Capital	Weighted Cost of Capital
		(a)	(b)	(c)=(a)x(b)
Equity capital	60.00	0.739	0.16	0.11824

	(Rs. 1.5 crores x Rs. 40)		(Refer to working note 1)	
11% Preference capital	0.75	0.009	0.1543	0.00138
	(Rs. 1 lakh x Rs. 75)		(Refer to working note 2)	
13.5% Debentures	8.00	0.098	0.127	0.01245
	(Rs. 10 lakhs x Rs. 80)		(Refer to working note 3)	
15% Term loans	12.50	0.154	0.09	0.01386
	____	____	(Refer to working note 4)	_____
	81.25	1.00		0.14593
		Weighted Average Cost of Capital		14.59%

Note: Since retained earnings are treated as equity capital for purposes of calculation of cost of specific source of finance, the market value of the ordinary shares may be taken to represent the combined market value of equity shares and retained earnings. The separate market values of retained earnings and ordinary shares may also be worked out by allocating to each of these a percentage of total market value equal to their percentage share of the total based on book value.

Working Notes:

1. Cost of Equity Capital and Retained Earnings (K_e)

$$K_e = \frac{D_1}{P_0} + g$$

Where,

K_e = Cost of equity capital

D_1 = Expected dividend at the end of year 1

P_0 = Current market price of equity share

g = Growth rate of dividend

Now, it is given that D_1 = Rs. 3.60, P_0 = Rs. 40 and g= 7%

Therefore, $$K_e = \frac{Rs.3.60}{Rs.40} + 0.07$$

or K_e = 16%

2. Cost of Preference Capital (K_p)

$$K_p = \frac{D + \left[\frac{F-P}{n}\right]}{\left[\frac{F+P}{2}\right]}$$

Where,

D = Preference dividend

F = Face value of preference shares

P = Current market price of preference shares

N = Redemption period of preference shares

Now, it is given that D= 11%, F=Rs. 100, P= Rs. 75 and n= 10 years

Therefore $K_p = \frac{11+\left[\frac{Rs.100-Rs.75}{10}\right]}{\left[\frac{Rs.100+Rs.75}{2}\right]} \times 100$

$= 15.43\ \%$

3. Cost of Debentures (K_d)

$$K_d = \frac{r(1-t)\left[\frac{F-P}{n}\right]}{\left[\frac{F+P}{2}\right]}$$

Where,

r = Rate of interest

t = Tax rate applicable to the company

F = Face value of debentures

P = Current market price of debentures

n = Redemption period of debentures

Now it is given that r= 13.5%, t=40%, F=Rs. 100, P=Rs. 80 and n=6 years

Therefore, $K_d = \frac{13.5(1-0.40)+\left[\frac{Rs.100-Rs.80}{6}\right]}{\left[\frac{Rs.100+Rs.80}{2}\right]} \times 100$

$= 12.70\%$

4. Cost of Term Loans (K_t)

$K_t = r\ (1 - t)$

Where,

r = Rate of interest on term loans

t = Tax rate applicable to the company

Now, r = 15% and t= 40%

Therefore, K_t = 15% (1 – 0.40) = 9%

8. (a) Profitability Ratios

Profitability ratios measure how effective a firm is at generating profit from operations. They are some of the most closely watched and widely quoted financial ratios. Management attempts to maximize these ratios to maximize firm value.

(i) Gross margin measures the percentage of each sale in rupees remaining after payment for the goods sold.

$$\text{Gross margin} = \frac{\text{Gross profit}}{\text{Net sales}} = \frac{\text{Rs. 18,108}}{\text{Rs. 58,247}} = 31.09\%.$$

Remember that gross profit is equal to net sales minus cost of goods sold.

(ii) Profit margin finds the proportion of revenue that finds its way into profits. Profit margin is calculated as net income divided by net sales, as shown below:

$$\text{Profit margin} = \frac{\text{Net income after interest and taxes}}{\text{Net sales}} = \frac{\text{Rs. 3,664}}{\text{Rs. 58,247}} = 6.29\%.$$

(iii) Operating profit margin measures the percentage of each sales in rupees that remains after the payment of all costs and expenses except for interest and taxes. This ratio is followed closely by analysts because it focuses on operating results. Operating profit is often referred to as earnings before interest and taxes or EBIT.

$$\text{Operating profit margin} = \frac{\text{Operating profit}}{\text{Net sales}} = \frac{\text{Rs. 5,830}}{\text{Rs. 58,247}} = 10.01\%.$$

(iv) Return on assets (return on investment) measures the percentage return generated on the assets available (investment). This ratio may be calculated as:

$$\text{Return on assets} = \frac{\text{Net income after interest and taxes}}{\text{Average total assets}} = \frac{\text{Rs. 3,664}}{\text{Rs. 28,203}} = 12.99\%.$$

$$\text{Average total assets} = \frac{(\text{Ending total assets} + \text{Beginning total assets})}{2}$$

$$= \frac{(\text{Rs. 30,011} + \text{Rs. 26,394})}{2}$$

$$= \text{Rs. 28,203.}$$

(v) Return on equity measures the percentage return generated to equity shareholders.

$$\text{Return on equity} = \frac{\text{Net income after interest and taxes}}{\text{Average shareholders' equity}} = \frac{\text{Rs. 3,664}}{\text{Rs. 18,942}} = 19.34\%.$$

$$\text{Average shareholders' equity (SE)} = \frac{(\text{Ending SE} + \text{Beginning SE})}{2}$$

$$= \frac{(\text{Rs.}19{,}802 + \text{Rs.}18{,}082)}{2}$$

= Rs. 18,942.

(vi) The dividend payout ratio measures the dividend paid in relation to net earnings. If Housestores Limited's dividend for the year was Rs. 0.22, the dividend payout is calculated as:

$$\text{Dividend payout ratio} = \frac{\text{Cash dividend per share}}{\text{Earnings per share}}$$

$$= \frac{\text{Rs.}0.22}{\text{Rs.}1.57}$$

= 0.14 or 14%.

(b) Asset Utilisation (Activity) Ratios

Asset utilization ratios measure the time it takes to convert various assets to sales or cash. Asset utilisation ratios are used to measure the efficiency with which assets are managed. For this reason, they are often called asset management ratios.

(i) Receivables turnover measures the number of times per year the balance of receivables is collected. This is a very important measure of the efficiency with which management is managing accounts receivables.

$$\text{Receivables turnover} = \frac{\text{Net credit sales}}{\text{Average accounts receivable}}$$

This ratio cannot be computed for Housestores Limited since the company does not break out the amount of credit sales.

(ii) The average collection period measures the average number of days it takes to collect an account receivable. This ratio is also referred to as the number of days of receivable and the number of day's sales in receivables.

$$\text{Average collection period} = \frac{\text{Average accounts receivable}}{\text{Average sales per day}}$$

Again, this ratio cannot be calculated for Housestores Limited because the company does not break out the amount of credit sales.

(iii) Inventory turnover measures the efficiency with which a firm utilizes (manages) its inventory.

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}} = \frac{\text{Rs. } 40{,}139}{\text{Rs. } 7{,}532} = 5.33 \text{ times}$$

$$\text{Average inventory} = \frac{(\text{Ending inventory} + \text{Beginning inventory})}{2}$$

$$= \frac{(\text{Rs. } 8{,}338 + \text{Rs. } 6{,}725)}{2}$$

= Rs. 7,532.

(iv) A related measure is the number of days' sales in inventory.

$$\text{Number of days' sales in inventory} = \frac{\text{Average inventory}}{\text{Cost of goods sold} / 365}$$

$$= \frac{\text{Rs. } 7{,}532}{\text{Rs. } 40{,}139 / 365}$$

= 68.49 days.

(v) Fixed asset turnover measures the efficiency with which the firm uses its fixed assets.

$$\text{Fixed asset turnover} = \frac{\text{Sales}}{\text{Average net fixed assets}} = \frac{\text{Rs. } 58{,}247}{\text{Rs. } 16{,}272} = 3.58 \text{ times}$$

$$\text{Average fixed assets} = \frac{(\text{Ending fixed assets} + \text{Beginning fixed assets})}{2}$$

$$= \frac{(\text{Rs. } 17{,}168 + \text{Rs. } 15{,}375)}{2}$$

= Rs. 16,272.

(vi) Total asset turnover measures the efficiency with which the firm uses its total assets.

$$\text{Total asset turnover} = \frac{\text{Sales}}{\text{Average total assets}} = \frac{\text{Rs. } 58{,}247}{\text{Rs. } 28{,}203} = 2.07 \text{ times}$$

(c) Liquidity Ratios

Liquidity ratios measure the firm's ability to meet its short-term obligations as they come due.

(i) The current ratio is the most common measure of short-term liquidity. It is sometimes referred to as the working capital ratio because net working capital is the difference between current assets and current liabilities.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} = \frac{\text{Rs. } 11{,}917}{\text{Rs. } 8{,}035} = 1.48$$

Where,

Current assets include cash and cash equivalents, net accounts receivable, marketable securities classified as current, inventories and prepaid expenses.

Current liabilities include accounts payable, short-term notes payable, current maturities of long-term debt, unearned revenue, and other accrued liabilities.

(ii) The quick (acid) ratio provides a more conservative measure of short-term liquidity. It takes out inventory because in times of financial difficulty inventory may be saleable only at liquidation value.

$$\text{Quick ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}} = \frac{\text{Rs.}11{,}917 - 8{,}338}{\text{Rs.}\,8{,}035} = 0.45$$

(d) Debt Utilisation Ratios

Debt utilisation ratios measure the effectiveness with which management finances the assets of the firm. They are used to evaluate the financial leverage of the firm.

(i) The debt to total assets measures the proportion of total assets financed with debt and, therefore, the extent of financial leverage.

$$\text{Debt to total assets} = \frac{\text{Total liabilities}}{\text{Total assets}} = \frac{\text{Rs.}10{,}209}{\text{Rs.}\,30{,}011} = 34.02\%$$

(ii) The debt to equity ratios also measures the extent of the firm's financial leverage.

$$\text{Debt to equity ratio} = \frac{\text{Total liabilities}}{\text{Total equity}} = \frac{\text{Rs.}10{,}209}{\text{Rs.}19{,}802} = 51.56\%$$

(iii) The times interest earned measures the firm's ability to make contractual interest payments.

$$\text{Times interest earned} = \frac{\text{Earnings before interest and taxes}}{\text{Interest expense}} = \frac{\text{Rs.}\,5{,}830}{\text{Rs.}\,37} = 157.57$$

(e) Market Ratios

Market ratios involve measures that consider the market value of the company's shares.

(i) The price/earnings (PE) ratio is the most commonly quoted market measure. Assuming that Housestores Limited's share price is Rs. 34.00, the price/earnings ratio would be computed as follows:

$$\text{Price / earnings} = \frac{\text{Market price per share}}{\text{Earnings per share}} = \frac{\text{Rs.}\,34}{\text{Rs.}1.57} = 21.66$$

(ii) The market / book ratio provides another evaluation of how investors view the company's past and future performance. To calculate the ratio, the book value per share must first be calculated.

$$\text{Book value per share} = \frac{\text{Total equity}}{\text{Number of shares outstanding}}$$

$$= \frac{\text{Rs. } 19{,}802}{2{,}362} = \text{Rs. } 8.38 \text{ per share}$$

Again, assuming a Rs. 34 market price per share, the market / book ratio is calculated as follows:

$$\text{Market / Book ratio} = \frac{\text{Market value per share}}{\text{Book value per share}}$$

$$= \frac{\text{Rs. } 34.00}{\text{Rs. } 8.38} = 4.06.$$

9. Schedule of Changes in Working Capital

	March 31, 2009	March 31, 2008	Impact on Working Capital	
			Increase	Decrease
Current Assets				
Stock	58,800	46,150	12,650	–
Prepaid expenses	1,900	2,300	–	400
Debtors	76,350	77,150	–	800
Trade Investments	40,000	1,05,000	–	65,000
Cash	77,400	95,900	–	18,500
	2,54,450	3,26,500	12,650	84,700
Current Liabilities				
Creditors	28,800	27,100	–	1,700
Bank overdraft	7,500	6,250	–	1,250
Accrued expenses	4,350	4,600	250	–
Income tax payable	48,250	16,850	–	31,400
	88,900	54,800	250	34,350
Net Working Capital	1,65,550	2,71,700	12,900	1,19,050
Decrease in net working capital	1,06,150	–	1,06,150	–
	2,71,700	2,71,700	1,19,050	1,19,050

Machinery Account

	Rs.		Rs.
Balance b/d	1,07,050	Sale of machinery (given)	9,150
Purchase of machinery (plug)	24,350	Depreciation (given)	11,400
		Balance c/d	1,10,850
	1,31,400		1,31,400

Trade Investments Account

	Rs.		Rs.
Balance b/d	1,05,000	Cash (sale of trade investments)	65,000
		Balance c/d	40,000
	1,05,000		1,05,000

Estimation of Funds flow from Operations

		Rs.
Profit after tax		51,050
Add: Depreciation on Buildings	6,600	
Depreciation on Machinery	11,400	18,000
		69,050
Less: Gain on sale of machinery		1,850
Funds from Operations		67,200

Note: Gain on sale of trade investment has been considered as an operating income. Trade investments have been considered as part of current assets.

Statement of Changes in Financial Position (Working Capital basis)
for the year ended March 31, 2009

	Rs.
Sources:	
Funds from operations	67,200
Sale of machinery on gain (9,150 + 1,850)	11,000
Debentures issued (Rs. 2,40,000 – 75,000)	1,65,000
Investment in 'A' Ltd. financial transaction and hence not affecting working capital	
Issue of share capital (including share premium)	1,15,000
Financial Resources Provided	3,58,200
Uses:	
Purchase of building (6,01,800 + 6,600 – 1,78,400)	4,30,000
Purchase of machinery	24,350
Payment of long-term loan	10,000
Financial Resources Applied	4,64,350
Net Decrease in Working Capital	1,06,150

10. (a) Calculation of Effective Annual Interest Rate

Effective Interest Rate (EAR) is calculated as follows:

$$EAR = \left(1+\frac{r}{m}\right)^{m} - 1$$

Where,

r = Stated interest rate

m = Compounding frequency

$$EAR = \left(1+\frac{0.08}{4}\right)^{4} - 1$$

= 1.0824 – 1 = 0.0824

= 8.24%

Effective Annual Interest Rate = 8.24%.

(b) Calculation of Annual Installment

$10,000 = A \times PVFA_{3,0.09}$

$10,000 = A \times 2.531$

$$A = \frac{10,000}{2.531} = \text{Rs. } 3,951$$

By paying Rs. 3,951 each year for three years, Adit shall completely pay-off his loan with 9 per cent interest. This can be observed from the loan-amortisation schedule given under:

Loan Amortisation Schedule

End of Year	Payment	Interest	Principal Repayment	Outstanding Balance
0				10,000
1	3,951	900	3,051	6,949
2	3,951	625	3,326	3,623
3	3,951	326	3,625*	0

*Rounding off error.

He pays Rs. 3,951 at the end of each year. At the end of the first year, Rs. 900 of this amount is interest (Rs. 10,000 $\times$ 0.09), and the remaining amount (Rs. 3,051) is applied towards the repayment of principal. The balance of loan at the beginning of the second year is Rs. 6,949 (Rs. 10,000 – Rs. 3,051). As for the first year, calculations for interest and principal repayment can be made for the second and third years. At the end of the third year, the loan is completely paid-off.

11. (a) Computation of Effective Cost of Factoring to Konika Electronics

Average level of Receivables = 3,20,00,000 × 90/360	80,00,000
Factoring commission = 80,00,000 × 2/100	1,60,000
Factoring reserve = 80,00,000 × 10/100	8,00,000
Amount available for advance = Rs. 80,00,000 – (1,60,000+8,00,000)	70,40,000

Factor will deduct his interest @ 18% :-

Interest = $\frac{Rs.70,40,000 \times 18 \times 90}{100 \times 360}$ Rs. 3,16,800

Advance to be paid = Rs. 70,40,000 – Rs. 3,16,800 = Rs. 67,23,200

Annual Cost of Factoring to Konika Electronics:	Rs.
Factoring commission (Rs. 1,60,000 × 360/90)	6,40,000
Interest charges (Rs. 3,16,800 × 360/90)	12,67,200
Total	19,07,200

Konika Electronics's Savings on taking Factoring Service:	Rs.
Cost of credit administration saved	5,00,000
Cost of Bad Debts (Rs. 3,20,00,000 x 1.5/100) avoided	4,80,000
Total	9,80,000
Net Cost to Konika Electronics (Rs. 19,07,200 – Rs. 9,80,000)	9,27,200

Effective rate of interest to Konika = $\frac{Rs.9,27,200 \times 100}{67,23,200}$ 13.79%*

*Note: The number of days in a year has been assumed to be 360 days.

(b) (i) Estimate of the Requirement of Working Capital

	Rs.	Rs.
A. Current Assets:		
Raw material stock (Refer to Working note 3)	6,64,615	
Work in progress stock (Refer to Working note 2)	5,00,000	
Finished goods stock (Refer to Working note 4)	13,60,000	
Debtors (Refer to Working note 5)	29,53,846	
Cash and Bank balance	25,000	55,03,461

B.	Current Liabilities:		
	Creditors for raw materials (Refer to Working note 6)	7,15,740	
	Creditors for wages (Refer to Working note 7)	91,731	8,07,471
	Net Working Capital (A-B)		46,95,990

(ii) The Maximum Permissible Bank Finance as per Tandon Committee Norms

First Method:

75% of the net working capital financed by bank i.e. 75% of Rs. 46,95,990

(Refer to (i) above)

= Rs. 35,21,993

Second Method:

(75% of Current Assets)- Current liabilities (i.e. 75% of Rs. 55,03,461)-Rs. 8,07,471

(Refer to (i) above)

= Rs. 41,27,596 – Rs. 8,07,471

= Rs. 33,20,125

Working Notes:

1. Annual Cost of Production

	Rs.
Raw material requirements (1,04,000 units × Rs. 80)	83,20,000
Direct wages (1,04,000 units × Rs. 30)	31,20,000
Overheads (exclusive of depreciation)(1,04,000 × Rs. 60)	62,40,000
	1,76,80,000

2. Work in progress Stock

	Rs.
Raw material requirements (4,000 units × Rs. 80)	3,20,000
Direct wages (50% × 4,000 units × Rs. 30)	60,000
Overheads (50% × 4,000 units × Rs. 60)	1,20,000
	5,00,000

3. Raw material Stock

It is given that raw material in stock is average 4 weeks consumption. Since, the company is newly formed, the raw material requirement for production and work in progress will be issued and consumed during the year.

Hence, the raw material consumption for the year (52 weeks) is as follows:

	Rs.
For Finished goods	83,20,000
For Work in progress	3,20,000
	86,40,000

Raw material stock $\frac{\text{Rs. } 86,40,000}{52 \text{ weeks}} \times 4 \text{ weeks}$

i.e. Rs. 6,64,615

4. Finished Goods Stock

8,000 units @ Rs. 170 per unit = Rs. 13,60,000

5. Debtors for Sale

Credit allowed to debtors	Average 8 weeks
Credit sales for year (52 weeks) i.e. (1,04,000 units-8,000 units)	96,000 units
Selling price per unit	Rs. 200
Credit sales for the year (96,000 units × Rs. 200)	Rs. 1,92,00,000
Debtors	$\frac{\text{Rs. } 1,92,00,000}{52 \text{ weeks}} \times 8 \text{ weeks}$
	i.e Rs. 29,53,846

6. Creditors for Raw material:

Credit allowed by suppliers	Average 4 weeks
Purchases during the year (52 weeks) i.e. (Rs. 83,20,000 + Rs. 3,20,000 + Rs. 6,64,615) (Refer to Working notes 1,2 and 3 above)	Rs. 93,04,615
Creditors	$\frac{\text{Rs. } 93.04.615}{52 \text{ weeks}} \times 4 \text{ weeks}$
	i.e Rs. 7,15,740

7. Creditors for Wages

Lag in payment of wages	Average $1\frac{1}{2}$ weeks
Direct wages for the year (52 weeks) i.e. (Rs. 31,20,000 + Rs. 60,000) (Refer to Working notes 1 and 2 above)	Rs. 31,80,000
Creditors	$\frac{\text{Rs. } 31,80,000}{52 \text{ weeks}} \times 1\frac{1}{2} \text{ weeks}$
	i.e. Rs. 91,731

12. (a) Traditional Phase and Modern Phase of Financial Management

During the Traditional Phase, financial management was considered necessary only during occasional events such as takeovers, mergers, expansion, liquidation, etc. Also, when taking financial decisions in the organisation, the needs of outsiders (investment bankers, people who lend money to the business and other such people) to the business was kept in mind.

Whereas, on the other hand, Modern Phase is still going on. The scope of financial management has greatly increased now. It is important to carry out financial analysis for a company. This analysis helps in decision-making. During this phase, many theories have been developed regarding efficient markets, capital budgeting, option pricing, valuation models and also in several other important fields in financial management.

(b) Liquidity Ratios and Activity Ratios

Liquidity or short-term solvency means ability of the business to pay its short-term liabilities. Inability to pay-off short-term liabilities affects its credibility as well as its credit rating. Continuous default on the part of the business leads to commercial bankruptcy. Eventually such commercial bankruptcy may lead to its sickness and dissolution. Short-term lenders and creditors of a business are very much interested to know its state of liquidity because of their financial stake. Therefore, liquidity ratios provide information about a company's ability to meet its short-term financial obligations.

Whereas, on the other hand, the activity ratios, also called the Turnover ratios or Performance ratios, are employed to evaluate the efficiency with which the firm manages and utilises its assets. These ratios usually indicate the frequency of sales with respect to its assets. These assets may be capital assets or working capital or average inventory. These ratios are usually calculated with reference to sales/cost of goods sold and are expressed in terms of rate or times.

(c) Debt Financing and Equity Financing

Financing a business through borrowing is cheaper than using equity. This is because:

- Lenders require a lower rate of return than ordinary shareholders. Debt financial securities present a lower risk than shares for the finance providers because they have prior claims on annual income and liquidation.
- A profitable business effectively pays less for debt capital than equity for another reason: the debt interest can be offset against pre-tax profits before the calculation of the corporate tax, thus reducing the tax paid.
- Issuing and transaction costs associated with raising and servicing debt are generally less than for ordinary shares.

These are some of the benefits from financing a firm with debt. Still firms tend to avoid very high gearing levels. One reason is financial distress risk. This could be induced by the requirement to pay interest regardless of the cash flow of the business. If the firm goes through a rough period in its business activities it may have trouble paying its bondholders, bankers and other creditors their entitlement.

(d) Financial Lease and Operating Lease

	Financial Lease	Operating Lease
1.	The risk and reward incident to ownership are passed on to the lessee. The lessor only remains the legal owner of the asset.	The lessee is only provided the use of the asset for a certain time. Risk incident to ownership belongs wholly to the lessor.
2.	The lessee bears the risk of obsolescence.	The lessee is only provided the use of asset for a certain time. Risks incidental to ownership belongs wholly to the lessor.
3.	The lessor is interested in his rentals and not in the asset. He must get his principal back along with interest. Therefore, the lease is non-cancellable by either party.	As the lessor does not have difficulty in leasing the same asset to other willing lessee, the lease is kept cancellable by the lessor.
4.	The lessor enters into the transaction only as financier. He does not bear the cost of repairs, maintenance or operations.	Usually, the lessor bears the cost of repairs, maintenance or operations.
5.	The lease is usually fully paid out, that is, the single lease repays the cost of the asset together with the interest.	The lease is usually non-payout, since the lessor expects to lease the same asset over and over again to several users.

13 (a) Role of Chief Financial Officer (CFO)

The chief financial officer of an organisation plays an important role in the company's goals, policies, and financial success. His responsibilities include:

(i) Financial analysis and planning: Determining the proper amount of funds to employ in the firm, i.e. designating the size of the firm and its rate of growth.

(ii) Investment decisions: The efficient allocation of funds to specific assets.

(iii) Financing and capital structure decisions: Raising funds on favourable terms as possible, i.e., determining the composition of liabilities.

(iv) Management of financial resources (such as working capital).

(v) Risk management: Protecting assets.

(b) Composition of ROE using Du Pont

There are three components in the calculation of return on equity using the traditional DuPont model- the net profit margin, asset turnover, and the equity multiplier. By examining each input individually, the sources of a company's return on equity can be discovered and compared to its competitors.

(i) Net Profit Margin: The net profit margin is simply the after-tax profit a company generates for each rupee of revenue.

Net profit margin = Net Income ÷ Revenue

Net profit margin is a safety cushion; the lower the margin, lesser the room for error.

(ii) Asset Turnover: The asset turnover ratio is a measure of how effectively a company converts its assets into sales. It is calculated as follows:

Asset Turnover = Revenue ÷ Assets

The asset turnover ratio tends to be inversely related to the net profit margin; i.e., the higher the net profit margin, the lower the asset turnover.

(iii) Equity Multiplier: It is possible for a company with terrible sales and margins to take on excessive debt and artificially increase its return on equity. The equity multiplier, a measure of financial leverage, allows the investor to see what portion of the return on equity is the result of debt. The equity multiplier is calculated as follows:

Equity Multiplier = Assets ÷ Shareholders' Equity.

Calculation of Return on Equity

To calculate the return on equity using the DuPont model, simply multiply the three components (net profit margin, asset turnover, and equity multiplier.)

Return on Equity = Net profit margin× Asset turnover × Equity multiplier

(c) Trading on Equity

The term 'trading on equity' is derived from the fact that debts are contracted and loans are raised mainly on the basis of equity capital. Those who provide debt have a limited share in the firm's earnings and hence want to be protected in terms of earnings and values represented by equity capital. Since fixed charges do not vary with the firms earnings before interest and tax, a magnified effect is produced on earnings per share. Whether the leverage is favourable in the sense increase in earnings per share more proportionately to the increased earnings before interest and tax depends on the profitability of investment proposals. If the rate of return on investment exceeds their explicit cost financial leverage is said to be positive.

In other words, it can be stated that trading on equity means using borrowed funds to generate returns in anticipation that the return would be more than the interest paid on those funds. Therefore, trading on equity occurs when a company uses

bonds, preference shares or any other type of debt to increase its earnings on equity shares. For example, a company may use long term debt to purchase assets that are expected to generate earnings more than the interest on the debt. The earnings in excess of the interest on the debt will increase the earnings of the company's equity shareholders. This increase in earnings indicates that the company was successful in trading on equity.

(d) External Commercial Borrowings (ECBs)

External Commercial Borrowings (ECBs) refer to commercial loans (in the form of bank loans, buyers credit, suppliers credit, securitised instruments (e.g. floating rate notes and fixed rate bonds) availed from non-resident lenders with minimum average maturity of 3 years. Borrowers can raise ECBs through internationally recognised sources like (i) international banks, (ii) international capital markets, (iii) multilateral financial institutions such as the IFC, ADB etc, (iv) export credit agencies, (v) suppliers of equipment, (vi) foreign collaborators and (vii) foreign equity holders.

External Commercial Borrowings can be accessed under two routes viz (i) Automatic route and (ii) Approval route. Under the Automatic route there is no need to take the RBI/Government approval whereas such approval is necessary under the Approval route. Company's registered under the Companies Act and NGOs engaged in micro finance activities are eligible for the Automatic Route whereas Financial Institutions and Banks dealing exclusively in infrastructure or export finance and the ones which had participated in the textile and steel sector restructuring packages as approved by the government are required to take the Approval Route.