www.canitinguru.com

FINANCIAL MANAGEMENT TOP 30 QUESTIONS

QUESTION BOOK

BY CA NITIN GURU

CLASSES ON WWW.CANITINGURU.COM
Join Telegram - canitinguru

FM TOP 30 Questions BY CA Nitin Guru

LEVERAGES

Question 1 - Study Material, May 2019

The capital structure of ABC Ltd. consist of an ordinary share capital of ₹ 5,00,000 (equity shares of ₹ 100 each at par value) and ₹ 5,00,000 (10% debenture of ₹ 100 each). Sales increased from 50,000 units to 60,000 units, the selling price is ₹ 12 per unit, variable cost amounts to ₹ 8 per unit and fixed expenses amount to ₹ 1,00,000. The income tax rate is assumed to be 50%.

You are required to calculate the following:

(a) The percentage increase in earnings per share;

(b) The degree of financial leverage at 50,000 units and 60,000 units;

(c) The degree of operating leverage at 50,000 units and 60,000 units;

(d) Comment on the behaviour E.P.S., operating and financial leverage in relation to increases in sales from 50,000 units to 60,000 units.

Question 2 - Rtp May 2021

Following information has been extracted from the accounts of newly incorporated Textyl Pvt. Ltd. for the Financial Year 2020-21:

Sales	Rs 15,00,000
P/V ratio	70%
Operating Leverage	1.4 times
Financial Leverage	1.25 times

Using the concept of leverage, find out and verify in each case:

(i) The percentage change in taxable income if sales increase by 15%.

(ii)The percentage change in EBIT if sales decrease by 10%.

(iii)The percentage change in taxable income if EBIT increase by 15%.

Question 3 - Jan 2021

The information related to XYZ Company Ltd. for the year ended 31st March, 2020 are as follows:

Equity Share Capital of ₹ 100 each	₹ 50 Lakhs
12% Bonds of ₹ 1000 each	₹ 30 Lakhs
Sales	₹ 84 Lakhs
Fixed Cost (Excluding Interest)	₹ 7.5 Lakhs
Financial Leverage	1.39
Profit-Volume Ratio	25%
Market Price per Equity Share	₹ 200
Income Tax Rate Applicable	30%

You are required to compute the following:

(i)Operating Leverage

(ii)Combined Leverage

(iii)Earnings per share

(iv)Earning Yield

Question 4 -

The data of SM Limited for the year ended 31st March 2020 is given below:

Fixed Cost (Excluding Interest)	₹ 2.25 Lakhs
Sales	₹ 45 Lakhs
Equity Share Capital of ₹ 10 each	₹ 38.50 Lakhs
12% Debentures of ₹ 500 each	₹ 20 Lakhs
Operating Leverage	1.2
Combined Leverage	4.8
Income tax rate	30%

Required:

(i)Calculate P/V ratio, Earning per share Financial leverage and Assets turNover.

(ii)If asset turNover of an industry is 1.1, then comment on adequacy of assets turNover of SM Limited.

(iii)At what level of sales the Earnings before tax (EBT) of SM Limited will be equal to zero?

Question 5 - Dec 2021

Information of A Ltd. is given below:
· Earnings after tax: 5% on sales
· Income tax rate: 50%
· Degree of Operating Leverage: 4 times
· 10% debentures in capital structure: ₹ 3 lakhs
· Variable costs: ₹ 6 lakhs
Required:
(i) From the given data complete the following statement:

Sales	XXXX
Less: Variable Costs	₹ 6,00,000
Contribution	XXXX
Less: Fixed Cost	XXXX
EBIT	XXXX
Less: Interest Expenses	XXXX
EBT	XXXX
Less: Income tax	XXXX
EAT	XXXX

(ii) Calculate the Financial Leverage and Combined Leverage.
(iii)Calculate the percentage change in earning per share, if sales increased by 5%.

Ratio Analysis

Question 6 -

Excellence Ltd. has the following data for projections for the next five years. It has an existing Term Loan of ₹ 360 lakhs repayable over next five years and has got sanctions for new term loan for ₹ 500 lakhs which is also repayable in five years. As a Finance Manager you are required to calculate:
(i) Interest Service coverage ratio and
(ii) Debt Service Coverage Ratio

Particulars	Amount(₹ in Lakhs)
Profit after tax	480
Depreciation	155
Taxation	125
Interest on Term Loans	162
Repayment of Term Loans	178

Question 7 - Study Material

Ganpati Limited has furnished the following ratios and information relating to the year ended 31st March, 2010.

Sales	₹ 60,00,000
Return on Net Worth	25%
Rate of Income Tax	50%
Share Capital to Reserves	7:3
Current Ratio	2
Net Profit to Sales	6.25%
Inventory Turnover (based on Cost of goods sold)	12
Cost of goods sold	₹ 18,00,000
Interest on Debentures	₹ 60,000
Sundry Debtors	₹ 2,00,000
Sundry Creditors	₹ 2,00,000

You are required to:
(a) Calculate the operating expenses for the year ended 31st March, 2010.
(b) Prepare a balance sheet as on 31st March in the following format:

Balance Sheet as on 31st March, 2010

Liabilities	₹	Assets	₹
Share Capital	-	Fixed Assets	-

Reserve and Surplus 15% Debentures Sundry Creditors	- - -	Current Assets Stock Debtors Cash	 - - -

Question 8 -

From the following particulars prepare the Balance Sheet of Krishna Ltd.

Current Ratio	2
Working Capital	₹ 2,00,000
Capital Block to Current Assets	3:2
Fixed Assets to Turnover	1:3
Sales Cash/Credit	1:2
Creditors Velocity	2 months
Stock Velocity	2 months
Debtors Velocity	3 months
Capital Block:	
Net profit –	10% of turnover
Reserve –	2 1/2% of turnover
Debenture/Share Capital –	1:2
Gross Profit Ratio –	25% (of sales)

Question 9 - Study Material

From the following information, you are required to PREPARE a summarised Balance Sheet for Rudra Ltd. for the year ended 31st March, 2023:

Debt Equity Ratio	1:1
Current Ratio	3:1
Acid Test Ratio	8:3
Fixed Asset Turnover (on the basis of sales)	4
Stock Turnover (on the basis of sales)	6
Cash in hand	₹ 5,00,000
Stock to Debtor	1:1
Sales to Net Worth	4
Capital to Reserve	1:2
Gross Profit	20% of Cost
COGS to Creditor	10:1

Interest for entire year is yet to be paid on Long Term loan @ 10%.

Cost of Capital

Question 10 - Nov 2022

The following is the extract of the Balance Sheet of M/s KD Ltd.:

Particulars	Amount (₹)
Ordinary shares (Face Value ₹ 10/- per share)	5,00,000
Share Premium	1,00,000
Retained Profits	6,00,000
8% Preference Shares (Face Value ₹ 25/- per share)	4,00,000
12% Debentures (Face value ₹ 100/- each)	6,00,000
	22,00,000

The ordinary shares are currently priced at ₹ 39 ex-dividend and preference share is priced at ₹ 18 cum-dividend. The debentures are selling at 120 percent ex-interest. The applicable tax rate to KD Ltd. is 30 percent. KD Ltd.'s cost of equity has been estimated at 19 percent. Calculate the WACC (weighted average cost of capital) of KD Ltd. on the basis of market value.

Question 11 - Rtp Nov 2023

Jason Limited is planning to raise additional finance of ₹ 20 lakhs for meeting its new project plans. It has ₹ 4,20,000 in the form of retained earnings available for investment purposes. Further details are as following:

Debt / Equity Mix	30 / 70
Cost of Debt	

Upto ₹ 3,60,000	8 % (before tax)
Beyond ₹ 3,60,000	12 % (before tax)
Earnings per share	₹ 4
Dividend pay-out	50% of earnings
Current Market Price per share	₹ 44
Expected Growth rate in Dividend	10 %
Tax	40%

You are required:

(a) To determine the cost of retained earnings and cost of equity.
(b) To determine the post-tax average cost of additional debt.
(c) To determine the pattern for raising the additional finance, and
(d) Compute the overall weighted average after tax cost of additional finance.

Question 12 -

On January 1, 2005 the total market value of the Octane Company was ₹ 60 million. During the year, the company plans to raise and invest ₹ 30 million in new projects. The firm's present market value capital structure, shown below, is considered to be optimal.

Assume that there is no short term debt.

Debt	₹ 3,00,00,000
Common Equity	₹ 3,00,00,000
Total Capital	₹ 6,00,00,000

New bonds will have an 8% coupon rate, and they will be sold at par. Common stock, currently selling at ₹ 30 a share, can be sold to net the company ₹ 27 a share. Stockholders required rate of return is estimated to be 12% consisting of a dividend yield of 4% and an expected constant growth rate of 8%. (The next expected dividend is ₹ 1.20, so, ₹ 1.20/30 = 4%) Retained Earnings for the year are estimated to be ₹ 3 million. The marginal corporate tax is 40%.

a) To maintain the present capital structure, how much of the new investment must be financed by common equity?
b) How much of the needed new common equity funds must be generated internally?
c) Calculate the cost of each of common equity component?
d) At what level of capital expenditures will the firm's WACC increase?
e) Calculate the firm's WACC using (1) the cost of retained earnings (First breaking point) and (2) the cost of new equity (second breaking point) (3) WACC of additional funds ₹ 30 million.

Question 13 - Study Material

ABC Ltd. has the following capital structure which is considered to be optimum as on 31st March, 2010.

Particulars	Amount (₹)
14% debentures	30,000
11% preference shares	10,000
Equity (10,000 shares)	1,60,000
	2,00,000

The company share has a market price of ₹ 23.60. Next year dividend per share is 50% of year 2010 EPS. The following is the trend of EPS for the preceding 10 years which is expected to continue in future.

Year	EPS (₹)	Year	EPS (₹)
2001	1.00	2006	1.61
2002	1.10	2007	1.77
2003	1.21	2008	1.95
2004	1.33	2009	2.15
2005	1.46	2010	2.36

The company issued new debentures carrying 16% rate of interest and the current market price of debenture is ₹ 96.

Preference share ₹ 9.20 (with annual dividend of ₹ 1.1 per share) was also issued. The company is in 50% tax bracket.

(A) Calculate after tax:
(i) Cost of new debt
(ii) Cost of new preference shares

(iii) New equity share (consuming new equity from retained earnings)
(B) Calculate marginal cost of capital when no new shares are issued.
(C) How much can be spent for capital investment before new ordinary shares must be sold. Assuming that retained earnings for next year's investment are 50 percent of 2010.
(D) What will the marginal cost of capital when the funds exceeds the amount calculated in (C), assuming new equity is issued at ₹ 20 per share?

Capital Structure

Question 14 - Study Material

The following figures are made available to you:

Net profits for the year	18,00,000
Less: Interest on secured debentures at 15% p.a.	
(Debentures were issued 3 months after the commencement of the year)	(1,12,500)
Profit before tax	16,87,500
Less: Income-tax at 35% and dividend distribution tax	(8,43,750)
Profit after tax	8,43,750
Number of equity shares (₹ 10 each)	1,00,000
Market quotation of equity share	₹ 109.70

The company has accumulated revenue reserves of ₹ 12 lakhs. The company is examining a project calling for an investment obligation of ₹ 10 lakhs. This investment is expected to earn the same rate as funds already employed.
You are informed that a debt equity ratio (Debt divided by debt plus equity) higher than 40% will cause the price earnings ratio to come down by 25% and the interest rate on additional borrowings will cost company 300 basis points more than on their current borrowings in secured. You are required to advise the company on the probable price of the equity share, if

a) The additional investment were to be raised by way of loans; or
b) The additional investments were to be raised by way of equity shares issued at ₹ 100 per share.

Question 15 - Rtp, Study Material

Ganesha Limited is setting up a project with a capital outlay of ₹ 60,00,000. It has two alternatives in financing the project cost.
Alternative (a): 100% equity finance in ₹ 200 shares.
Alternative (b): Debt-equity ratio 2:1
The rate of interest payable on the debts is 18% p.a. The corporate tax rate is 40%. Calculate the indifference point between the two alternative methods of financing.

Question 16 - Study Material

Following data is available in respect of two companies having same business risk:
Capital employed = ₹2,00,000 ,EBIT = ₹30,000 Ke = 12.5%

Sources	Levered company (₹)	Unlevered company (₹)
Debt (@ 10%)	1,00,000	Nil
Equity	1,00,000	2,00,000

Investor is holding 15% shares in levered company. CALCULATE increase in annual earnings of investor if he switches his holding from Levered to Unlevered company.

Working Capital Management

Question 17 -

The following information is provided by MNP Ltd. for the year ending 31st March, 2020:

Raw Material Storage period	45 days
Work-in-Progress conversion period	20 days
Finished Goods storage period	25 days
Debt Collection period	30 days
Creditors payment period	60 days
Annual Operating Cost	₹ 25,00,000

(Including Depreciation of ₹ 2,50,000)
Assume 360 days in a year.
You are required to calculate:
(i)Operating Cycle period
(ii)Number of Operating Cycle in a year.
(iii)Amount of working capital required for the company on a cost basis.
(iv)The company is a market leader in its product, and it has no competitor in the market. Based on a market survey it is planning to discontinue sales on credit and deliver products based on pre-payments in order to reduce its working capital requirement substantially. You are required to compute the reduction in working capital requirement in such a scenario.

Question 18 - Mtp April 2021

Kady Ltd. sells goods at a uniform rate of gross profit of 20% on sales including depreciation as part of cost of production. Its annual figures for the year ending 31st March 2021 are as under:

Particulars	(₹)
Sales (at 2 months' credit) Materials consumed (Supplier's credit 2 months) Wages paid (Monthly at the beginning of the subsequent month) Manufacturing expenses (Cash expenses are paid – one month in arrear) Administration expenses (General) (Cash expenses are paid – one month in arrear) Selling expenses (Paid quarterly in advance)	12,00,000 3,00,000 2,40,000 3,00,000 75,000 37,500

The company keeps one month stock each of raw materials and finished goods. A minimum cash balance of ₹ 40,000 is always kept. The company wants to adopt a 15% safety margin in the maintenance of working capital.Ignore work in progress.Find out the requirements of working capital of Kady Ltd. on cash cost basis.

Question 19 - Study Material, Similar Rtp Nov 2022

PQ Ltd., a company newly commencing business in 2019 has the following projected Profit and Loss Account:

Particulars	(₹)	(₹)
Sales		2,10,000
Cost of goods sold		1,53,000
Gross Profit		57,000
Administrative Expenses	14,000	
Selling Expenses	13,000	27,000
Profit before tax		30,000
Provision for taxation		10,000
Profit after tax		20,000
The cost of goods sold has been arrived at as under:		
Materials used	84,000	
Wages and manufacturing Expenses	62,500	
Depreciation	23,500	
	1,70,000	
Less: Stock of Finished goods (10% of goods produced not yet sold)	17,000	
	1,53,000	

The figure given above relate only to finished goods and not to work-in-progress. Goods equal to 15% of the year's production (in terms of physical units) will be in process on the average requiring full materials but only 40%.
of the other expenses. The company believes in keeping materials equal to two months' consumption in stock. All expenses will be paid one month in advance. Suppliers of materials will extend 1-1/2 months credit. Sales will be 20% for cash and the rest at two months' credit. 70% of the Income tax will be paid in advance in quarterly installments. The company wishes to keep ₹ 8,000 in cash. 10% has to be added to the estimated figure for unforeseen contingencies.
PREPARE an estimate of working capital. Note: All workings should form part of the answer.

Question 20 - Rtp
Jaidev Ltd has total credit sales of ₹ 40 lakhs p.a. and its average collection period is 90 days. The past experience indicates that the Bad Debt losses are around 3% of credit sales. Jaidev spends about ₹ 1,00,000 per annum on administrating its credit sales. It is considering availing the services of a Factoring Firm. It has received offer from Uday Ltd, which agrees to buy the receivables of Company. Uday will charge Commission of 3% and also agrees to pay advance against receivables at an Interest Rate of 18% p.a. after withholding 10% as Reserve. Should Jaidev accept Uday's offer if the former's ROI is 15%? Assume 360 days in a year.

Question 21 - Study Material
XYZ Corporation is considering relaxing its present credit policy and is in the process of evaluating two proposed policies. Currently, the firm has annual credit sales of ₹. 50 lakhs and accounts receivable of ₹. 12,50,000. The current level of loss due to bad debts is ₹. 1,50,000. The firm is required to give a return of 20% on the investment in new accounts receivables. The company's variable costs are 70% of the selling price. Given the following, which is the better option?

Particulars	Present Policy	Policy Option I	Policy Option II
Annual credit sales	50,00,000	60,00,000	67,50,000
Accounts receivable	12,50,000	20,00,000	28,12,500
Bad debt losses	1,50,000	3,00,000	4,50,000

Question 22 - Study Material
Prepare monthly cash budget for six months beginning from April 2010 on the basis of the following information:
(i) Estimated monthly sales are as follows:

Particulars	Amount(₹)	Particulars	Amount(₹)
January	1,00,000	June	80,000
February	1,20,000	July	1,00,000
March	1,40,000	August	80,000
April	80,000	September	60,000
May	60,000	October	1,00,000

(ii) Wages and salaries are estimated to be payable as follows:

Particulars	Amount (₹)	Particulars	Amount (₹)
April	9,000	July	10,000
May	8,000	August	9,000
June	10,000	September	9,000

(iii) Of the sales, 80% is on credit and 20% for cash. 75% of the credit sales are collected within one month and the balance in two months. There are no bad debt losses.
(iv) Purchase amount to 80% of sales and are made and paid for in the month preceding the sales.
(v) The firm has 10% debentures of ₹ 1,20,000. Interest on these has to be paid quarterly in January, April and so on.
(vi) The firm is to make an advance payment of tax of ₹ 5,000 in July, 2010.
(vii) The firm had a cash balance of ₹ 20,000 on April 1, 2010, which is the minimum desired level of cash balance. Any cash surplus/deficit above or below this level is made up by temporary investments /liquidation of temporary investment or temporary borrowings at the end of each month (interest on these to be ignored).

Dividend Decisions
Question 23 - Study Material
The following figures are collected from the annual report of XYZ Ltd.:

Net Profit	₹ 30 lakhs
Outstanding 12% preference shares	₹ 100 lakhs
No. of equity shares	3 lakhs
Return on Investment	20%
Cost of capital i.e. (Ke)	16%

COMPUTE the approximate dividend pay-out ratio so as to keep the share price at ₹ 42 by using Walter's model?

Question 24 - Nov 2019

Following figures and information were extracted from the company A Ltd. Earnings of the company	₹ 10,00,000
Dividend paid	₹ 6,00,000
No. of shares outstanding	2,00,000
Price earnings ratio	10
Rate of return on investment	20%

Question 25 - Study Material

RST Ltd. has a capital of ₹ 10,00,000 in equity shares of ₹ 100 each. The shares are currently quoted at par. The company proposes to declare a dividend of ₹ 10 per share at the end of the current financial year. The capitalization rate for the risk class of which the company belongs is 12%. COMPUTE market price of the share at the end of the year, if

(i) Dividend is not declared ?

(ii) Dividend is declared ?

(iii) Assuming that the company pays the dividend and has net profits of ₹ 5,00,000 and makes new investments of ₹ 10,00,000 during the period, how many new shares must be issued? Use the MM model.

Investment Decision

Question 26 - May 15

Following are the data on a Capital project being evaluated by the management of X Ltd.

Particulars	Project M
Annual cost saving	₹ 40,000
Useful life	4 years
I.R.R	15%
Profitability Index (P.I)	1.064
NPV	?
Cost of capital	?
Cost of project	?
Payback	?
Salvage value	0

Find the missing values considering the following table discount factor only:

Discount factor	15%	14%	13%	12%
1 year	0.869	0.877	0.885	0.893
2 year	0.756	0.769	0.783	0.797
3 year	0.658	0.675	0.693	0.712
4 year	0.572	0.592	0.613	0.636
	2.855	2.913	2.974	3.038

Question 27 - Nov11,Nov12 (SIMILAR)

A Ltd. is considering the purchase of a machine which will perform some operations which are at present performed by workers. Machines X and Y are alternative models. The following details are available:

Particulars	Machine X (₹)	Machine Y (₹)
Cost of machine	1,50,000	2,40,000
Estimated life of machine	5 years	6 years
Estimated cost of maintenance p.a.	7,000	11,000
Estimated cost of indirect material p.c.	6,000	8,000
Estimated savings in scrap p.a.	10,000	15,000
Estimated cost of supervision p.a.	12,000	16,000
Estimated savings in wages p.a.	90,000	1,20,000

Depreciation will be charged on straight line basis. The tax rate is 30%. Evaluate the alternatives according to:

(i) Average rate of return method, and

(ii) Present value index method assuming cost of capital being 10%.

Question 28 - Rtp

Fair Ltd. is a manufacturer of high quality running shoes. Hari, President, is considering computerizing the company's ordering, inventory and billing procedures. He estimates that the annual savings from computerization include a reduction, of 10 clerical employees with annual salaries of ₹ 15,000 each, ₹ 8,000 from, reduced production delays caused by raw materials inventory problems, ₹ 12,000 from lost sales due to inventory stock out and ₹ 3,000 associated with timely billing procedures. The purchase price of the system is ₹ 2,00,000 and installation costs are ₹ 50,000. These outlays will be capitalized (depreciated) on a straight-line basis to a zero book salvage value, which is also its Market value at the end of 5 years. Operation of the new system requires two computer specialists with annual salaries of ₹ 40,000 per person. Also annual maintenance and operating (cash) expenses of ₹ 12,000 are estimated to be required. The company's tax rate is 40% and its required rate of return (cost of capital) for this project is 12%. You are required to:

(i) Find the project's initial net cash outlay;
(ii) Find the project's operating and terminal value cash flows over its 5-year life;
(iii) Evaluate the project using NPV method;
(iv) Evaluate the project using PI method;
(v) Calculate the project's payback period;
(vi) Find the project's cash flows and NPV *parts (i) through (iii)+ assuming that the system can be sold for ₹ 25,000 at the end of five years even though the book salvage value will be zero; and
(vii) Find the project's cash flows and NPV *parts (i) through (iii)+ assuming that the book salvage value for depreciation purposes is ₹ 20,000 even though the machine is worthless in terms of its resale value.

Note: Present value of annuity of Re. 1 at 12% rate of discount for 5 years is 3.605.
Present value of Re. 1 at 12% rate of discount, received at the end of 5 years is 0.567.

Question 29 -

S. Ltd. has ₹ 10,00,000 allocated for capital budgeting purposes. The following proposals and associated profitability indexes have been determined.

Project	Amount (₹)	Profitability Index (₹)
1	3,00,000	1.22
2	1,50,000	0.95
3	3,50,000	1.20
4	4,50,000	1.18
5	2,00,000	1.20
6	4,00,000	1.05

Which of the above investments should be undertaken? Assume that projects are indivisible and there is no alternative use of the money allocated for capital budgeting.

Question 30 -

S Engineering Company is considering to replace or repair a particular machine, which has just broken down. Last year this machine costed₹ 20,000 to run and maintain. These costs have been increasing in real terms in recent years with the age of the machine. A further useful life of 5 years is expected, if immediate repairs of ₹ 19,000 are carried out. If the machine is not repaired it can be sold immediately to realise about ₹ 5,000 (Ignore loss/gain on such disposal).

Alternatively, the company can buy a new machine for ₹ 49,000 with an expected life of 10 years with no salvage value after providing depreciation on straight line basis. In this case, running and maintenance costs will reduce to ₹ 14,000 each year and are not expected to increase much in real terms of a few years at least. S Engineering Company regards a normal return of 10% p.a. after tax as a minimum requirement on any new investment. Considering capital budgeting techniques, which alternative will you choose? Take corporate tax rate of 50% and assume that depreciation on straight line basis will be accepted for tax purposes also. Given cumulative present value of Re. 1 p.a. at 10% for 5 years ₹ 3.791, 10 years ₹ 6.145.

www.canitinguru.com

BOOST YOUR EXAM PREP WITH THE ULTIMATE REVISION GUIDE! THIS FINANCIAL MANAGEMENT FAST TRACK BOOK IS TAILORED FOR CA INTERMEDIATE STUDENTS, OFFERING CONCISE THEORY, ESSENTIAL FORMULAS, AND EXAM-FOCUSED SOLUTIONS TO HELP YOU REVISE SMARTER AND SCORE HIGHER.

STAY CONNECTED:

FOR EXCLUSIVE TIPS, RESOURCES, AND UPDATES, FOLLOW US ON:

1. LINKEDIN: WWW.LINKEDIN.COM/IN/CANITINGURU
2. TELEGRAM: @CANITINGURU
3. YOUTUBE: CA NITIN GURU
4. CANITINGURU.COM

by CA NITIN GURU