

**Chapter wise Test (2003)**  
**Capital Structure**

Instructions

- All questions are compulsory.
- Test Duration will be 1 Hour, starting from 11:00 AM to 12:00 Noon
- 5 minutes reading time will be provided before 11, i.e. question paper will be shared by 10:55 AM.
- Share your scanned answer sheets by 12:10 on below link  
<https://forms.gle/wLRZWiTvMELNpCeC6>

1. [7 Marks] The following particulars relating to Nandu Ltd for the year ended 31 March 2023 is given

Output - 1,00,000 units at normal capacity	
Selling price per unit	Rs. 40
Variable cost per unit	Rs. 20
Fixed Cost	Rs. 10,00,000

The capital structure of the company as on 31 march 2023 is as follows

Particulars	Amount
Equity Share Capital (100,000 shares at Rs. 10 each)	10,00,000
Reserves and Surplus	5,00,000
7% Debentures	10,00,000
Current Liabilities	5,00,000
Total	30,00,000

Nandu Ltd has decided to undertake an expansion project to use the market potential, that will involve 10 lakhs.

The company expects an increase in output by 50% Fixed cost will be increased by ₹ 5,00,000 and variable cost per unit will be decreased by 10%. The additional output can be sold at the existing selling price without any adverse impact on the market.

The following alternative schemes for financing the proposed expansion programme are planned:

1. Entirely by equity shares of 10 each at par
2. 5 lakh by issue of equity shares of 10 each and the balance by issue of 6% debentures of 100 each at par
3. Entirely by 6% debentures of 100 each at par

Find out which of the above-mentioned alternatives would you recommend for Nandu Ltd. with reference to the risk and return involved, assuming a corporate tax of 40%

2. [6 Marks] A company needs Rs. 42,50,000 for the construction of a new plant. The following three plans are feasible:

- I The company may issue 4,25,000 equity shares at Rs. 10 per share.
- II The company may issue 2,12,500 equity shares at Rs. 10 per share and 21,250 debentures of Rs. 100 denominations bearing an 8% rate of interest.
- III The company may issue 2,12,500 equity shares at Rs. 10 per share and 21,250 cumulative preference shares at Rs. 100 per share bearing an 8% rate of dividend.
- (i) The company's earnings before interest and taxes are Rs. 75,000, Rs. 1,50,000, Rs. 3,00,000, Rs. 4,50,000 and Rs. 7,50,000. DETERMINE earnings per share under each of three financial plans? Assume a corporate income tax rate of 40%.
- (ii) IDENTIFY which alternative would you recommend and why?
- (iii) DETERMINE the EBIT-EPS indifference points by formulae between Financing Plan I and Plan II and Plan I and Plan III.
3. [5 Marks] Kee Ltd. and Lee Ltd. are identical in every respect except for capital structure. Kee Ltd. does not employ debt in its capital structure, whereas Lee Ltd. employs 12% debentures amounting to Rs. 20 lakhs. Assuming that:
- (i) All assumptions of MM model are met;
- (ii) The income tax rate is 30%;
- (iii) EBIT is Rs. 5,00,000 and
- (iv) The equity capitalization rate of Kee Ltd. is 25%.
- CALCULATE the average value of both the Companies.
4. [5 Marks] Rounak Ltd. is an all equity financed company with a market value of Rs. 25,00,000 and cost of equity (Ke) 21%. The company wants to buyback equity shares worth Rs. 5,00,000 by issuing and raising 15% perpetual debt of the same amount. Rate of tax may be taken as 30%. After the capital restructuring and applying MM Model (with taxes), you are required to COMPUTE:
- (i) Market value of J Ltd.
- (ii) Cost of Equity (Ke)
- (iii) Weighted average cost of capital (using market weights) and comment on it.
5. [7 Marks] The following data relates to two companies belonging to the same risk class:

Particulars	A Ltd.	B Ltd.
Expected Net Operating Income	Rs. 18,00,000	Rs. 18,00,000
12% Debt	Rs. 54,00,000	-
Equity Capitalization Rate	-	18

REQUIRED:

- (a) Determine the total market value, Equity capitalization rate and weighted average cost of capital for each company assuming no taxes as per M.M. Approach.
- (b) Determine the total market value, Equity capitalization rate and weighted average cost of capital for each company assuming 40% taxes as per M.M. Approach.