Vidya Vikas Education Trust
Universal College of Engineering
Page No.
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BF assignment

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1. Option D
2. A
3. D
4. D

5(i) Sales - Costs = EBIT = 2500 - 1500 = 1000
less Taxes (40% of 500) = 400
NOPAT = 600

(ii) PV of Inflow 600/1.2 = 500
NPV will go up

6. For analysis any business efficiency, I will analysis below three ratios. These ratios help us to calculate the cash conversion cycle of a business which is the time taken by the business to convert its investments in inventory and other resources into cash flows from sales. The trade receivables take to settle their balance and the trade payable turnover period tells us how long a company takes to pay off its creditors.

7.

1. Ratio analysis uses historical information that may not give the true picture about the current state of my business.

b. It relies heavily on the reports provided by the company, so if the reports are found to be misleading then the analysis may also be deemed fallacious.

c. It does not consider the human element of a firm.

d.) Changes in accounting policies of a firm from one year to next will deem it difficult to compare ratios from past year to the latest.

e.) Ratio analysis relies on financial statements as and when published by the firm, so it does not consider the seasonal changes in business.

8. β measures the volatility of a stock in relation to the market. Different stocks tend to have different β values as various businesses will have varying levels of profit, desirability, and price movements in the market. Stocks can trade at different β as:-

a.) varying degree of performance
b.) demand for the stock
c.) market sentiment towards stocks.

(ii.) Geared beta = Ungeared beta.

Q10. Specific risks are risks that are specific to companies and can be mitigated by diversification. Eg:- A company has a bad quarter.
Systematic risks apply to the market or the industry as a whole and cannot be mitigated through diversification.
eg:- Interest Rates are raised.

(ii) Systematic risks are risks that apply to the entire market and are tougher to mitigate than specific risks that apply to individual firms. The type of risk being carried by a project has a role to play in its viability, as project managers always try & and maximise risk to the highest possible ~~to~~ extent.
Risk analysis is carried out in many ways (risk matrices, scenario analysis etc) and gives the manager an overview of how viable the project is. Metrics like the NPV & IRR are then calculated by considering the identified risks & the viability of the project determined.

11.

(i) Beta is the measure of a calculating systematic risk; it compares the returns a company has generated against the market. It measures how a particular stock will perform in relation to the market.

(ii) Beta is calculated by dividing the covariance between the company and market returns and dividing it by the variance of market returns.

(iii) I think its better to invest in stock that has a beta of 1, as this means that the stock moves perfectly in line with beta. This would mean that I get returns that are the same as market returns.

(iv) Government Bonds are likely to have beta of 0.

Q12 $\frac{D}{C} = \frac{1}{1}$

$R_f = 7\%$

eq risk premium = 5%

cost of debt = 9%

R = 1.5%

t = 5%

Cost of equity = R_f + Eq Risk Premium × β

= 7% + 5% × 1.5

= 14.5%.

~~(i) = net cost of~~

(i) net cost of debt = gross cost of debt (1-ta

= 9% (1 - 25%)

= 6.75%.

WACC = cost of equity × $\frac{MV \text{ of eq}}{MV \text{ of } t + MV \text{ of debt}}$ +

cost of debt × $\frac{MV \text{ of debt}}{MV \text{ of eq} + MV \text{ of debt}}$

= 14.5% × $\frac{1}{1+1}$ + 6.75% × $\frac{1}{1+1}$

= 10.625%

(iii) (i) first we will calculate the ungeared β of the company

$$\beta_G = \beta_{UG} \times \left[1 + \frac{D}{G}(1-t)\right]$$

$$1.5 = \beta_{UG} \times (1 + 1(1 - 25\%))$$

$$\therefore \beta_{UG} = 0.857142857)$$

Since all the debt will be repaid the company will not have leverage. Hence β_{UG} will be new β of the company.

$$K_e = K_f + \beta K_{mf}$$

$$= 7\% + 5\% \times 0.857142857$$

$$= 11.28571$$

This will also bet the WACC in this case one the isn't any debt.

Q14. (i) a Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$.

This ratio is used to asses whether the company will be able to pay its bills over the next few months It provides a comparison of an estimate of the amount of money due to be received vs the amount of money to be paid.

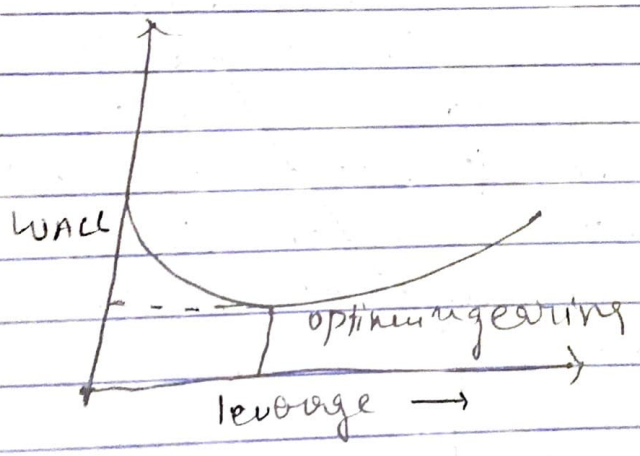
b.) Debtors over period:

$$\frac{\text{Net credit Sales}}{\text{Avg receivable}}$$

This ratio indicates the number of average debtors are turned over during the year.

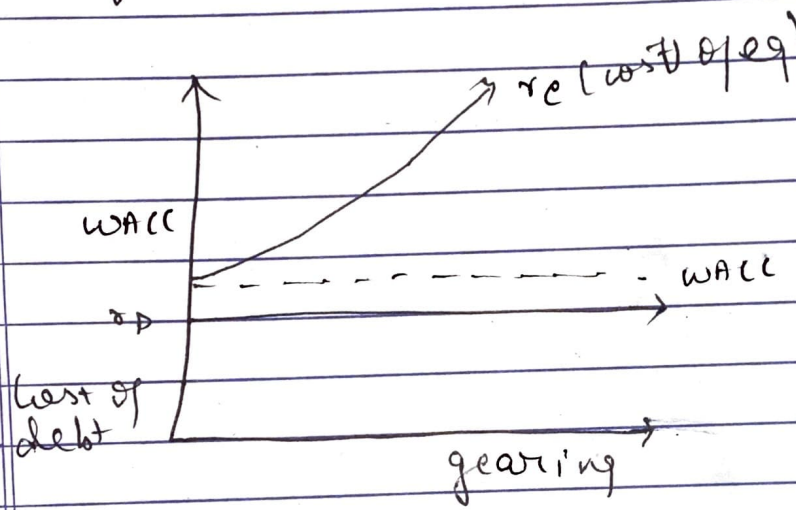
Q.15. (i) Since the dividend yield is a good investor who wants a steady want from the investment would consider buying the share of his company.

(ii) Net cost of debt is cheaper than cost of equity hence any financial officer would want do increase the weightage of debt capital structure. But as an when debt increases gearing also inc and hence the risk borne by the shareholders & investors also increases and hence the cost of capital inc. Hence, initially the WACC will decrease due to the favourable effect of leverage but after a certain point the WACC will have to inc the point is called optimum gearing.



(iii.) Modigliani and Miller's theory had made the following assumption
a) There is no tax
b) Debt is risk free
c) The company is funded only by debt & equity
d) There is no agency cost
e) Interest rate is constant
f) Unlimited borrowing allowed.

(iv)



(v.) (a.) risk free rate = R_f = 6%
MRP = 5%
β_{eq} = 1.4
$\Rightarrow$ re = R_f × MRP × β
= 6% + 5% + 1.4 = 13%

b. Capital employee = 100 M
M.V of debt = 40% = 40% × 100 = 40 M
∴ M.V of equity = 100 − 40 = 60
gearing ratio = $\frac{D}{B_{eq}} = \frac{40}{00} = 0.6667$