

Business Finance - I Assignment.

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Q.1 D

Q.2 A

Q.3 D

Q.4 C

Q.5.

i) Cash of inflow = 2500

Cash outflow = 1500

total cash flow = 1000

tax rate is 40%.

 $\therefore 1000 (1 - 40\%) = 600$ ii) PV of inflow ($i = 20\%$) = $2500 (1 + 20\%)^{-1}$
= 2083.3iii) PV of out flow = $1500 (1 + 20\%)^{-1}$
= 1250
$$\begin{aligned}
 PV &= \text{PV of inflow} - \text{PV of outflow} \\
 &= 2083.055 - 1250 \\
 &= 833.333
 \end{aligned}$$

iii) If supplies allow delayed payment

$$\begin{aligned}\text{Then PV of outflow} &= 1500 \times (+1.2)^{-2} \\ &= 104.6667 \\ &= 1041.6663\end{aligned}$$

8.6) i) In a company there must be sufficient liquid assets available to ensure that one company can meet its short term commitments otherwise the company could be forced into liquidation.

ii) These efficiency ratios are related to company liquidity ratios.

iii) This gives insights to company liquidity ratios effectiveness of company's management regarding the components of working capital.

iv) Inventory Turnover Period.

$$= \frac{\text{Investment in inventory}}{\text{cost of sales}} \times 365$$

This ratio tells us about how long the inventory is held on an average. It shows how much inventory a company holds in relation to the scale of the company's operations.

The inventory turnover period that is less rapid than the period of companies in the same field may indicate inefficiency. Large inventory holding.

One limitation of the ratio is that the figure of inventories may be subject to seasonal variations.

1.) Trade receivable turnover period.

$$\frac{\text{Trade receivables}}{\text{Credit sales}} \times 365$$

This is to measure the average length of time taken to trade receivables to settle their balance.

It is desirable for this period of time to be as short as possible.

It will be better for the company cash flows if those owing the company pay as quickly as possible.

ti) Payable turnover period = $\frac{\text{payable}}{\text{credit purchase}}$ x 365

Q.7)

a) It directs attention from the figures & statements themselves.

i) It is important to look at figures such as the shelter size of the company. A larger company will have more bargaining power.

ii) It is also important to look at the notes which are generally not reflected in the ratios.

For eg. if a company is big sued for damages this will be measured in the notes along with the damaged if possibly given

Q.8.7 i) Beta is the measure of systematic risk
 ii) CAPM divides the volatility of a stock price into two parts specific risk and systematic risk.

$$iii) B = \frac{\sigma_{im}}{\sigma_m^2}$$

where σ_{im} is the covariance of individual stock return of the market
 σ_m^2 is the variance of market return

iv) Inflation rates can affect companies in different ways

v) A change in tax can have an impact on all companies.
 Currency movements will affect all the countries

$$ii) B_{ger} = 1.1$$

$$D:E = 1:2$$

$$t = 30\%$$

First we will find the unlevered Beta of the country.

$$B_u = B_{ge} \left(1 + \frac{D}{E} (1-t) \right)$$

$$1.1 = B_u \left(1 + 1.2 (1-30\%) \right)$$

$$1:1 = B_{11} (1 + 1.2(70\%))$$

$$B_{11} = 0.81482$$

$$B_4 = B_{11} \left(1 + \frac{D}{E} (1-t) \right)$$

$$= 0.81482 \left(1 + \frac{2}{2} (70\%) \right)$$

$$= 1.3851851$$

8.9) D) In general the market value of investments must not be related to the net present value

8.10) The first problem is in measuring shareholder wealth. This is clearly indicated by two share price, but that can be a volatile indicator, that is not necessarily affected by just the company's efforts to manage the shareholders wealth. Furthermore management decisions that enhance shareholder wealth will only be recognised in the share price once the decision itself is announced. This information might be withheld for commercial reasons. The second problem is that the directors are often preoccupied with their own rewards at the

expense of the shareholder or of avoiding acceptable risks in order to put their jobs security before the wellbeing of the shareholder.

Given

Price of the share = ₹ 100

$$Div_0 = 10$$

$$\text{Growth } (g) = 8\%$$

$$\text{Risk free rate } (R_F) = 6\%$$

$$\text{Risk Premium } (K_M - R_F) = 5\%$$

$$\text{Expected Dividend } Div_1 = Div_0 (1+g) = 10 \cdot 108 = 10.8$$

$$R_e = (Div_1 / \text{Price}) + g$$

$$= (10.8 / 100) + 0.08$$

$$= 23.43\%$$

Now, as per CAPM

$$R_e = R_F + (K_M - R_F) \cdot \text{Beta}$$

$$23.43 = 6 + 5 \cdot \text{Beta}$$

Hence Beta = 3.486

Now, systematic risk is increased by

80% i.e

Beta is increased by 30%.

$$\text{New Beta} = 6.255$$

$$\text{So, new } R_e = 6 + 5 \cdot 6.255$$

$$= 37.375\%$$

$$\begin{aligned} \text{New share price} &= \text{Div 1} / (K_e - g) \\ &= 10.8 / (0.37375 - 0.08) \\ &= 36.77. \end{aligned}$$

Hence share price is expected to fall from current level of Rs. 70 to Rs. 36.77 i.e. by 33.23%.

Q.11)

- i) The beta of a project is a measure of the systematic risk of the project relative to a diversified portfolio of all risky assets the market would have a beta of 1

The beta of the company (B_p) is given by the following

$$B_p = \frac{\sigma_{pm}}{\sigma_m^2}$$

where,

σ_{pm} = the covariance between the returns expected from the company and the returns expected from the market

σ_m^2 is the variance of the returns expected from the market

- ii) The beta of the company may be measured by
- looking at the company's historical returns on equity and comparing against market returns, $\therefore$ dependent upon the time period considered.
 - considering the industry