

## Vidya Vikas Mandal's

Shree Damodar College of Commerce &amp; Economics, Margao

PGDFT, Semester II, Semester End Examination, June 2022

DFTO 211: Capital Investment and Financing Decisions

Duration: 3 hours

Max. Marks 60

**Instructions:**

1. This paper consists of **Nine** Questions carrying **Equal** marks.
2. Question No.1 consists of **5 Compulsory** Questions of **2 Marks Each**.
3. Answer any **5** questions from Question **2,3,4,5,6,7,8 and 9**.
4. **Each** question carries **10** marks. Figures to the **right** indicate marks.

**Q.1) Calculate the following values:****(5x2=10)**

- a. The future value of 10 lakhs for 5 years at 12% p.a.
- b. If you have 1 crore in 2050 at inflation rate of 6%, how much is that today in 2022?
- c. What is the EMI (monthly) of a 15 year housing loan of Rs.30 lakhs bearing interest rate of 8.30%.
- d. If the EMI is 9104.25 at an interest rate of 9% p.a. on a loan of 8 lakhs, in how many years will the loan be squared off?
- e. You are looking at a car loan of 10 lakhs with an EMI of 23424.07 for 5 years. What is the interest rate per annum, that is offered to you?

**Q2. Answer the following in brief:**

- a. Write briefly about some of the factors that help decide the capital structure.
- b. Mention some strategies adopted to manage earnings.
- c. What are the assumptions of Walter Model & Gordons Model for dividend distribution?

**(10)**

**Q3.** Stan, 34 years old has approached you to help with his financial plan. He is currently employed with a salary package post tax of 18 lakhs per annum. His monthly expenses amount to around 75 thousand.

He intends to have his full tenure of work till the age of 60 years.

He wants your help in ensuring that he will be able to have equivalent of 75 thousand per month when he retires considering an inflation rate of 6.50% p.a. He being a conservative investor wants a corpus capitalized at 8.50%.

He currently has a savings in GOI bonds bearing an interest rate of 9.50% amounting to 15 lakhs and an FD for 25 lakhs.

He intends to invest in mutual funds estimated to give him annual returns of 14.50%.

He wants to buy a house for Rs 80 lakhs, for which he intends to utilize the FD as down payment. Considering an interest rate of 8.25% for a loan of 15 years for the balance amount, should he consider buying the house? How much will he need to invest to achieve his goal of maintain his monthly expense going forward?

**(10)**

**Q4.** Annie is a finance manager tasked with the duty of evaluating the projects. She uses NPV, IRR and Payback to arrive at the decisions. Based on the data of the 3 projects that has been compiled with the help of her team, which project would she recommend to the management. The company has a debt equity ratio of 0.25. The cost of equity is 16% and debt post tax at 8.50%

Year	Alpha	Beta	Gamma
1	-10 Cr	-10 Cr	-10 Cr
2	-4 Cr	-4 Cr	-4 Cr
3	5 Cr	8 Cr	6 Cr
4	8 Cr	8.50 Cr	6 Cr
5	12 Cr	8.50 Cr	13 Cr

(10)

**Q5.** Zoher has approached seeking your advice to raise money for What should be the discount factor that Zoher should look at for discounting his projected cash flows?

The product of the startup is very similar to Ramco Systems a listed company with a beta of 1.4, This being a startup, mark up the volatility by 3 times.

The Nifty IT Index is the benchmark for this company which is currently at 15774 and was at 1477 in June 2000.

The 10 years 7.50% GOI Bond is trading at 9438.5.

The company has initial debt borrowed at 19% and the current debt equity ratio is 0.3. The effective tax rate of the company is just 5%.

The VC company is looking to make a return of 24% p.a., Will they agree with the discount rate used for the cash flows?

(10)

**Q6.** The company is making a return of 18% on its investment. The company has made an EPS of 20 per share.

The cost of equity is 16.50%. The board is deliberating of announcing a dividend keeping in mind the above facts and wanting to enhance the shareholders value. They have an option of declaring dividend of either 4,6,8 or 10 per share.

Using the Walter and the Gordon model, kindly advise the board as to the amount of dividend to be announced.

(10)

**Q7. Answer the following:**

- a) The annual sales of Fun Manufacturers is 480 Crs. Its production cycle is of 12 days. The finished goods in stock averages 8 days. The average stock of raw material is 12 crs, and the transit time for the same is 5 days.
- The average debtors on its books is 84 Crs. Fun manufacturers has to pay its creditors in advance and the lead time for the suppliers to ship the goods is 21 days.
- Kindly calculate the cash to cash cycle and the estimated working capital based on the limited information. The gross profit for the firm is 18%.

(5)

b) You have the following information from Trade Ltd which has approached you to avail of finance. Your company has a policy of not granting loans to companies which has an interest coverage ratio below 6 and debt service coverage ratio below 3 based on the latest audited financials.

The following is the extract of balance sheet:

Long term Loans	100 Crs
Short Term loans (Payable in a year)	25 Crs
Cash Credit	40 Crs

The following numbers from P&L:

EBITDA	109 Crs
Depreciation	18 Crs
Interest	17 Crs

Will you advance the loan to Trade Ltd along with the reasons for granting / declining the loan? (5)

**Q8. Answer the following:**

- Financial controller makes the following statement: "Our earnings per share is 2.00 and the market price of the share is 25, hence our cost of capital is 8%". State with reasons if the argument is valid.
- Why does money have time value?
- Discuss the factors that are relevant for Dividend Payouts.

(10)

**Q9. Answer the following:**

- Why is the effective tax rate important in computation of cost of debt? (2)
- What does beta signify cost of equity under CAP-M Model. (2)
- The gross cost of debt is 8.75%. The effective tax rate is 16%. The cost of equity is 14.8%. The debt equity ratio is 0.35. What is the WACC? (3)
- Following data is for Arc Ltd.,  
 EPS – 8 per share  
 Rate of Return – 16%  
 Cost of Equity – 12%  
 What will be the share price under Gordon method if the payout ratio is 50%, 60% and 100%. (3)

\*\*\*\*\*THE END\*\*\*\*\*