VIT
Vellore Institute of Technology

Continuous Assessment Test –Fall Semester - October 2022

Programme	: B Tech	Semester	: Fall (2022-23)
Course Title	: Accounting and Financial Management	Code	: MGT1028
		Slot	: B1+TB1
Faculty	: Dr Sharon Sophia	Class Nbr	: CH2022231000534
Time	: One Hour and Thirty Minutes	Max. Marks	: 50

Answer any 4 Questions (4*12.5=50 Marks)

1. HUL will manufacture 4000 units of Dove soap per day. The sale of this product depends upon demand which has the following distribution –

Sales(Units)	3,700	3,800	3,900	4,000	4,100	4,200
Probability	.10	.15	.20	.35	.15	.05

The production cost and sale price of each unit are Rs. 4 and Rs. 5 respectively. If products manufactured less than the demand is at a loss of Rs. 1.50 per unit. There is a penalty of Rs .50 per unit for excess produced. Using the following random numbers estimate total profit/loss for the company for next 10 days – 11, 98, 66, 97, 95, 01, 79, 12, 17,21. If HUL decides to produce 3,900 items per day, what is profit/loss position of HUL?

- What is categorical random numbers? Explain.

2. ABC Corporation for the purpose of implementing a project requires a special purpose machine worth Rs. 12000 for a time period of 2 years & cost of capital. Identify:
   - NPV under joint probability.
   - The best option in case it is abandoned.
   - Mean net present value for effective utilization of the project.

Cash Flow Year 1	Probability	Cash Flow Year 2	Probability
8000	.30	7000	.3
		8000	.5
		9000	.2
9000	.40	8000	.3
		9000	.4
		10000	.3
10000	.30	9000	.2
		10000	.5
		11000	.3

- What is Joint Probability? Explain

3. Jet Airways airlines are planning to identify the cost of capital for its new ventures. Identify how this source of capital will affect Lufthansa airlines.

S.No	Particulars	Units Rs.	Issue Price			Cost of Issue	Tax Rate	Redemption Price	Time period	Market price	Growth
			Par	Premium	Discount	Rs.			YEARS	Rs.	
1	8% Debentures	30000	Rs. 10	Rs 12	Rs. 9	5000	30%	Rs. 15	10	30	-
2	10% Preference Shares	30000	Rs. 10	Rs 13	Rs.8	5000		Rs. 18	10	40	-
3	Equity Shares	40000	Rs. 10							60	5%
	Total	100000									

- EPS of Rs. 12 per share. Its Dividend Payout Ratio is 60%. Calculate weighted average cost of capital.
- State the uses of WACC?

4. HCL want to know their leverage and its effect on EBIT – EPS analysis indicates for these companies. Leverage exists when an investor achieves the right to a return on a capital base that exceeds the investment which the investor has personally contributed to the entity or instrument achieving a return.

Particulars	HCL(Rs.)
Sales	6,00,000
Variable cost	40%
Fixed cost	60%
10%Debentures	1,00,000
Tax	30%
Equity Shares	50000 shares @ Rs10

- If the company wants to analyse its leverage identify – financial, operating, combined leverage, % change in EBIT and % change in EPS.
- If sales, variable and fixed cost increases to 10%
- If sales, variable and fixed cost decrease by 10%.
- The company takes up EBIT – EPS analysis, if 1 stands for increase, 2 stands for decrease and 0 stands for no change.
- State the relationship between EPS, DPS and MPS.

5. Peter England wishes to prepare cash budget from January 2022. Prepare a cash budget for the month of March to June from the following estimated revenue and expenses:

Month	Sales	Purchase	Wages	Production Overheads	Administrative Overheads	Selling and Distribution Overheads
January	20,000	10,000	2,000	1000	1000	2000
February	30,000	20,000	2,500	3000	2000	4000
March	40,000	30,000	3,000	5000	3000	6000
April	50,000	40,000	3,500	7000	4000	8000
May	60,000	50,000	4,000	9000	5000	10000
June	70,000	60,000	4,500	11000	6000	10000

- Cash balance on 1st January, 2022 was Rs. 6,00,000.
- Cash sales is 20% and credit sales is 80%. Period of credit allowed to customers – 2month.
- Cash purchase is 30% and credit purchase is 70%. Period of credit allowed by supplier – 2 months.
- Bad debts and sales return is 1% on sales.
- Share premium received in the month of March Rs. 50,000.
- Share 1st call received in the month of April Rs. 70,000
- Sale of plant in the month of May Rs. 60,000

- Dividend received in the month of June Rs. 80,000
- New machinery is to be installed at Rs. 40,000 on credit, to be repaid by2 equal installments in March and April.
- Production and Office Overhead is delayed by 1 month and Selling and Distribution Overheads delayed by 2 months.
- Ex gratia paid to employees Rs. 80,000 in the month of March.
- Wages paid to employees only on ¼ basis and it is carried forward.

6. The following data relates to 4 firms

Firm	A	B	C	D
EBIT	5,00,000	6,00,000	7,00,000	8,00,000
Interest	20,000	60,000	1,50,000	2,00,000
Eq. Capitalization rate (Ke)	12%	16%	15%	18%
Interest for debenture(Ko)	10%	10%	10%	10%

Assuming that there is no tax. Determine the value and WACC of each firm using the Net income and Net operating income approach. If Ke is considered as Ko for NOI approach.

TT ltd has a EBIT of Rs. 8,00,000. Presently the company is entirely financed by Equity capital o Rs 40,00,000 with Equity capitalization rate of 16%. It is contemplating to redeem a part of its capital by introducing debt financing. It has two options – to raise debt to the tune of 40% and 70% of the total funds. It is expected that for debt financing up to 40% will cost 10%, and Equity capitalization rate will rise by 17%. However, if the firm opts for 70% debt, it will cost 12% and Equity shareholders expectation will be 20%. Compute over cost of different options and comment.

- Diagrammatically present NI, NOI, TA and MMH

7. If Samsung incorporation has to adopt a debt – equity mix the concern is its risk premium will affect the whole structure. A company estimates its Cost of debt and cost of equity for different Debt – Equity mix, as under. If the overall cost of capital is 18%.

% of Debt	0%	30%	40%	50%	70%	90%
Cost of debt	-	20%	30%	14%	16%	16%
Cost of equity	28%	39%	24%	25%	32%	40%

- Compute the overall cost of capital and optimal debt – equity mix under the traditional theory.
- Consider the cost of debt at different debt – equity mix as given above. If M & M approach were to hold well, what will be the cost of equity capital at different debt – equity mix? What will be the risk premium?
- Difference between Cost of Debt and Cost of Equity.