

**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**

**PGDM / PGDM (M) / PGDM (SM)**

**SECOND TRIMESTER (Batch 2022-24)**

**END-TERM EXAMINATIONS, JANUARY 2023**

**Set-III (END TERM)**

Course Name	Corporate Finance	Course Code	20202
Max. Time	2 hours	Max. Marks	40 MM

**INSTRUCTIONS:**

**All questions are mandatory.**

**In Excel sheets, you must use a formula to enter a value in a cell. You can't use the Fx function.**

**Each student will answer on a different sheet of one Excel document and upload it with their name and roll number.**

Q1. A firm is evaluating a new investment proposal that requires an initial outlay of Rs.350,000. The useful life is eight years and the resultant cash inflows are given in the following table. The project is subject to a depreciation of 25% rate as per written down value method. If the salvage at the end of useful life is half of the book value, Analyse whether the project be undertaken if the cost of capital is 15%?  
**(CLO 2; BT Level IV; Marks:8)**

Year	Cash Flows
0	-350000
1	80000
2	80000
3	80000
4	120000
5	120000
6	120000
7	120000
8	100000

Q2. Torrent Manufacturing, an established producer of printing equipment, expects its sales to remain flat for the next 3 to 5 years. Weak economic outlook and an expectation of low technology development over that period, being the primary reasons. On the basis of his scenario, the firm's

management has been instructed by its board to institute programs that will allow it to operate more efficiently, earn higher profits and most important, maximize share value.

In this regard, the firm's Chief Financial Officer, Aakash Dhingra has been charged with evaluating the firm's capital structure. Aakash believes that the current capital structure, which contains 10% debt and 90% equity, may lack adequate financial leverage. To evaluate the firm's capital structure, Aakash has gathered the data summarized in the following table on the current capital structure (10% debt ratio) and two alternative capital structures – Option A with 30% debt in the capital structure and Option B with 50% debt in the capital structure.

Sources of Capital	Capital Structures		
	Current	A	B
	(10% debt)	(30% debt)	(50% debt)
Long term debt	1 Million	3 Million	5 Million
Coupon interest rate	9%	10%	12%
Equity shares	100,000 shares	70,000 shares	40,000 shares
Total Capital	Rs 10 Million	Rs 10 Million	Rs 10 Million

Aakash expects the firm's earnings before interest and tax (EBIT) to remain at its current level of Rs 1.2 Million. The corporate tax rate is 40%. **(CLO 2; BT Level V; Marks: 2X5=10)**

- Estimate cost of equity given the risk-free rate being 6%, expected market return of 18% and equity beta of the firm is 1.2.
- Estimate EPS and WACC for every capital structure alternative and recommend the best alternative.

Q3. Suppose your expectation regarding return of stock X is as follows :

State of Economy	Probability	Holding Period Return
Boom	0.3	0.44
Normal Growth	0.4	0.14
Recession	0.3	-0.16

**(CLO 2; BT Level V; Marks: 2x3=6)**

- Estimate mean and SD of holding period return of the stock.
- Estimate what could be the possible range of return of the share statistically assuming the returns are normally distributed?

Q4. The relevant financial information for JP Limited for the year ended 2021 is given below:

Profit and Loss Account Data	Balance Sheet Data (Rs. million)
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<i>(Rs. million)</i>			Beginning of 2021	End of 2021
Sales	80	Inventory	9	12
Cost of goods sold	56	Accounts receivable	12	16
		Accounts payable	7	10

**(CLO 3; BT Level II, IV)**

- Analyze the operating and cash cycle of the firms by assuming the 365 days in a year? **(Marks 6)**
- Explain why the cash cycle is different from the operating cycle of the firms? **(Marks 2)**
- Explain methods to shorten the cash cycle of the JP Limited. **(Marks 2)**

Q5. You borrow Rs12,00,000 at an interest rate of 15% and the loan is to be repaid in 5 equal instalments, compute the annual instalment payment (that is, equated yearly installment - EYI). Determine a loan amortization schedule showing opening balance, principal component and interest component for each year distinctly. **(CLO 3; BT Level V; Marks: 6)**