**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**SECOND TRIMESTER (Batch 2019-21)**

**END TERM EXAMINATION, DECEMBER-2019**

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| --- | --- | --- | --- |
| Course Name | **Corporate Finance** | Course Code | **FIN201** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS: Attempt all Qs. TVM tables are not allowed.**

**Questions.1 (14 Marks)**

Graphite Limited is a manufacturer of floor tiles. The income statement and balance sheet of previous year are given below:

**Income Statement**

|  |  |
| --- | --- |
| **Particulars** | **₹ in Lakh** |
| Sales  Variable Costs  Contribution  Fixed Costs  EBIT  Interest  EBT  Tax  PAT | 200  (120)  80  (20)  60  (10)  50  (9)  21 |

**Balance Sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| **Liabilities** | **₹ in Lakh** | **Assets** | **₹ in Lakh** |
| Equity Capital  Reserve & Surplus  Long term Debt  Current Liabilities | 40  20  80  30 | Fixed Assets  Inventory  Receivables  Cash | 100  40  20  10 |
| TOTAL | 170 | TOTAL | 170 |

The company plans to extend the production line in forthcoming years. The expected capital investment is ₹20 lakh. If implemented, the sales are expected to rise by 20%. The variable cost per unit is expected to rise by 5% and the fixed cost is also expected to rise by 10%.

Graphite Limited is pondering on the following two options for financing the project:

Option 1: Borrow the entire fund at an interest of 10% per annum.

Option 2: Borrow 40% at an interest rate of 8% and rest of the capital through equity shares.

1. Compute the company’s degree of operating leverage, degree of financial leverage and degree of total leverage before adoption of the new proposal.
2. Given the tax rate 30%, beta 1.2, risk-free rate 6% and the expected return in the market portfolio 14%, which of the two options for financing will you recommend? Show relevant workings
3. Compute the degree of operating leverage, degree of financial leverage, and degree of total leverage after adoption of new proposal.
4. Assess the impact of adopting the new proposal on operating risk, financial risk and total risk of the company.

**Questions.2 (10 Marks)**

A firm has Rs 10 lakhs paid up capital, retained earnings of Rs 50000 and 10000 equity shares. There is Rs. 50000 of earnings available for distribution to the shareholders. It has a Fixed asset of Rs 8 lakhs and current Assets of Rs 3 Lakhs.

1. Create a Balance sheet of the firm and explain the effect of a cash dividend of Rs 2 per share on the company’s balance sheet.
2. Also explain the effect of a stock dividend of 10:1 on the company’s balance sheet

**Questions.3 (6 Marks)**

Anil Industries turns over its inventory 6 times each year; it has an average collection period of 45 days and an average payment

period of 30 days. The firm’s annual operating-cycle investment is Rs.3 million. Assume a 360-day year. (5)

1. Calculate the firm’s cash conversion cycle, its daily cash operating expenditure, and the amount of resources needed to support its cash conversion cycle.
2. Calculate the firm’s cash conversion cycle and resource investment requirement if it makes the following changes simultaneously.
3. Shortens the average age of inventory by 5 days.
4. Speeds the collection of accounts receivable by an average of 10 days.
5. Extends the average payment period by 10 days.

**Questions.4 (6 Marks)**

Newton Ltd. has a capital structure that is financed, based on current market values, with 50 per cent debt, 10 per cent preference shares and 40 per cent ordinary shares. If the return offered to the investors for each of those sources is 8 per cent, 10 per cent and 15 percent for debt, preference shares and ordinary shares, respectively, then what is Capital’s after-tax WACC? Assume that the firm’s marginal tax rate is 40 per cent.

**Questions.5 (4 Marks)**

ABC Ltd. has been performing well on the profitability front with its sales growing at average 15-20% in the past four years. However, the firm has been facing liquidity problems in the recent past. In order to improve its liquidity position the company management is considering liberalizing its credit terms by introducing a cash discount. Such a measure is expected to induce the debtors to pay their dues before the current maturity period of 30 days and therefore, is likely to bring down its average collection period by 15 days. In net terms, the funds tied up in receivables are likely to come down due to the introduction of cash discount. Should ABC Ltd. introduce cash discount?

The current sales of the firm are Rs 655 lakhs. The company is planning a cash discount policy of 3/10 net 30. Based on the market research done by company it is expected that 80% of the accounts are likely to avail the cash discount facility. The company's required rate of return is 18%.