**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

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

**END TERM EXAMINATION, DECEMBER-2019**

**SET-2**

|  |  |  |  |
| --- | --- | --- | --- |
| 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 (6 Marks) = CLO 1. Difficulty Level: Easy.**

Sun company system limited has forecasted returns on its share with the following probability distribution:

|  |  |
| --- | --- |
| Return (%) | probability |
| -10 | 0.2 |
| 10 | 0.3 |
| 20 | 0.4 |
| 30 | 0.1 |

Calculate the expected return, variance and standard deviation of returns for Sun and interpret the result.

**Questions.2 (10+2 = 12 Marks) = CLO 2. Difficulty Level: Medium**

A company is considering the following investment projects:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Projects** | **C0** | **C1** | **C2** | **C3** |
| A | -10000 | 10000 |  |  |
| B | -10000 | 7500 | 7500 |  |
| C | -10000 | 2000 | 4000 | 12000 |
| D | -10000 | 10000 | 3000 | 3000 |

1. Rank the project according to each of the following methods: (i) IRR (ii) NPV; assuming discount rate of 12%
2. Assuming the projects are independent, recommend which should be accepted and why?

**Questions.3 (4+4 = 8 Marks) = CLO 3. Difficulty Level: Easy**

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. 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. Also explain the effect of a stock dividend of 1: 1 on the company’s balance sheet

**Questions.4 (2+8+4 = 14 Marks) = CLO 2 & 3. Difficulty Level: Hard**

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%.

1. Calculate cost of equity given the risk free rate being 6%, expected market return of 18% and equity beta of the firm is 1.2.
2. Calculate EPS and WACC for every capital structure alternative and comment on the following
   1. Which capital structure will maximize Torrent’s EPS at its expected level of EBIT of Rs. 1.2 Million
   2. Which capital structure will minimize Torrent’s WACC at its expected level of EBIT of Rs. 1.2 Million
   3. On the basis of your finding above, which capital structure will you recommend for the Company and why?
3. Calculate the Degree of Financial Leverage and interpret the values.