**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**SECOND TRIMESTER (Batch 2021-23)**

**END TERM EXAMINATION, JAN-2022**

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| --- | --- | --- | --- |
| Course Name | **Corporate Finance** | Course Code | **FIN 201** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS:**

1. This is an Open book exam
2. All answers calculated on Excel must be reproduced in the answer sheet
3. Students are only allowed to use their personal laptops without internet connectivity

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**Q1.** Apollo Ltd. needs Rs. 10 lakh (one million) for expansion. The expansion is expected to yield an annual EBIT of Rs. 1, 60,000. In choosing a financial plan, AB ltd. has an objective to maximizing earning per share. It is considering the possibility of issuing equity shares and raising debt of Rs. 1, 00,000, or Rs. 4, 00,000 or Rs. 6, 00,000. The current market price per share is Rs. 25 and is expected to drop to Rs. 20 if the funds are borrowed in excess of Rs. 5, 00,000. Funds can be borrowed at the rates indicated below: (a) up to 1,00,000 at 8%; (b) over Rs 1,00,000 up to Rs. 5,00,000 at 12%; (c) over Rs. 5,00,000 at18%. Assume a tax rate of 50%.

1. Which capital structure will maximize EPS?
2. Determine and comment on the financial leverage position of the company under these three alternatives. [2+ 3 = 5 Marks]

**Q2.** A bank lends Rs 500,000 @ 12% for 15 years. Prepare a loan amortization schedule to exhibit the total repayment including interest assuming interest is paid quarterly. If the loan period is reduced to 12 years, what is the total interest paid by the customer? **[5 Marks]**

**Q3.** For each of the companies described below, would you expect it to have a medium/high or a low dividend payout ratio? Explain Why.

i) A company with a large proportion of inside ownership, all of whom are high income individuals.

ii) A growth company with an abundance of good investment opportunities

iii) A company experiencing ordinary growth that has high liquidity and much unused borrowing capacity

iv) A dividend paying company that experiences an unexpected drop in earnings from a trend.

v) A company with volatile earnings and high business risk. **[5 Marks]**

**Q4.** The following is the capital structure of Simons company Ltd. as on 31st March, current year Equity share: 10,000 shares (of Rs 100 each) Rs 50,00,000

10% Debentures Rs 40,00,000

**90,00,000**

The market price of the company’s share is Rs 110 and it is expected that a dividend of Rs 10 per share would be declared at the end of the current year. The dividend growth rate is 6 per cent. (i) If the company is in the 35 per cent tax bracket, compute the weighted average cost of capital. (iii) Assuming that in order to finance an expansion plan, the company intends to borrow an additional fund of Rs 10 lakh bearing 12 per cent rate of interest, what will be the company’s revised weighted average cost of capital? **[5 Marks]**

**Q5.** Evaluate the various discounted project appraisal techniques with respect to their advantage sand disadvantages. A firm is evaluating four mutually exclusive projects with initial investment of Rs 20,00,000 (Project A, 10 years), Rs 30,00,000 (Project B, 7 years), Rs 25,00,000 (Project C, 9 years) and Rs 15,00,000 (Project D, 14 years). The discount rate to be used is 12%. The firm has a budget constraint of Rs 80,00,000. Which of these projects can be selected? Compare and evaluate the NPVs of each of these projects. The respective cash flows are given below: **[2+3+5=10 Marks]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Years** | **Project A (10 years)** | **Project B (7 years)** | **Project C (9 years)** | **Project D (14 years)** |
| 1-5 | 300000 | 250000 | 350000 | 200000 |
| 6 | 250000 | 400000 | 300000 | 450000 |
| 7 | 200000 | 350000 | 300000 | 250000 |
| 8-9 | 250000 | -- | 350000 | 350000 |
| 10 | 300000 | -- | -- | 400000 |
| 11-14 | -- | -- | -- | 250000 |

Q6. Refer to the Excel sheet. It contains monthly data of two stocks X and Y and the market. Which combination of stocks X and Y will minimize the portfolio variance? Reproduce the various weights, optimized weight and other variables computed in the answer sheet. [NO NEED TO SUBMIT THE EXCEL SHEET] **[10 Marks]**