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| **C:\Users\ADMIN\Desktop\j.png** | **JAIPURIA INSTITUE OF MANAGEMENT, INDORE**  Post Graduate Diploma in Management |
| **Course Title: Corporate Finance, (Course Code: 40202)**  **End-Term Examination, Term - II (January, 2025)** | |
| **Time Duration : 2 Hours Total Marks: 40** | |

***General Instructions*:**

*a) Answer the questions as directed. The break-up of the marks is given wherever necessary.*

*b) Marks against each question is indicated to its right.*

*c) Do not write on the question paper except your roll number.*

*d) This exam is completely an MS -excel based exam. No answer sheet will be given.*

*e) Students need to submit one excel workbook as an answer script. The workbook will have multiple worksheets.*

*f) Students need to solve each question in a separate worksheet and name the worksheet with ques no.*

*g) No Internet access will be given.*

*h) No formula, interest factors tables will be provided.*

*i) Students should continually keep saving their work.*

*j) Students should save the final excel answer file with their name and roll no.*

1. You are considering two independent projects that have differing requirements. Project A has a required return of 12 percent compared to Project B’s required return of 13.5 percent. Project A costs $75,000 and has cash flows of $21,000, $49,000, and $12,000 for Years 1 to 3, respectively. Project B has an initial cost of $70,000 and cash flows of $15,000, $18,000, and $41,000 for Years 1 to 3, respectively. Appraise both the projects using NPV and justify that both the projects should be rejected. **Marks: 4**
2. An investment with an initial cost of $15,000 produces cash flows of $5,000 annually for 5 years. The discount rate is 10 percent. The management keeps the cutoff discounted payback period as 3 years. Mr. Macbeth, the CFO of the firm, rejects the project. Argue the decision of Mr. Macbeth. **Marks: 5**
3. The weighted average cost of capital of a firm is 9.5%. The firm has an aftertax cost of debt of 6.5% and a cost of equity of 12.75%. Evaluate the capital structure of the firm by suggesting the debt-equity ratio that is needed to achieve the targeted weighted average cost of capital. **Marks: 5**
4. A firm has zero debt and an overall cost of capital of 13.8 percent. The firm is considering a new capital structure with 40 percent debt. The interest rate on the debt would be 7.2 percent and the corporate tax rate is 34 percent. What would be the cost of equity with the new capital structure? Compare the cost of equity in both the capital structures. **Marks: 4**
5. Rhythm Academy is currently an all-equity firm with 20,000 shares of stock outstanding, each priced at $28. The firm’s cost of equity is 14 percent, and the tax rate is 35 percent. The Rhythm Academy is considering introducing $125,000 of debt into its capital structure, which will have a coupon rate of 6.5 percent and will be issued at par. What will be the value of the firm’s equity after the debt is added? Appraise this change in the value of the firm’s equity. **Marks: 4**
6. XYZ firm has a debt:equity ratio of 1:4. The yield to maturity of the firm’s bond is 10 percent. The tax rate of the firm is 35%. The beta of the firm’s stock is 1.5. The return on 91 day t-bill is 5% and the market return is 12%. Calculate and examine the weighted average cost of capital of the firm. **Marks: 4**
7. Allison's has a market value equal to its book value. Currently, the firm has excess cash of $1,100 and other assets of $12,400. Equity is worth $13,500. The firm has 2,500 shares of stock outstanding and net income of $10,800. Appraise what will be the new earnings per share if the firm uses its excess cash to complete a stock repurchase?

**Marks: 4**

1. A company has 125,000 shares of stock outstanding at a market price of $93 a share. The company has just announced a 5-for-2 stock split. Judge how many shares will be outstanding after the split. **Marks: 3**
2. The market value of XYZ Corporation's common stock is $40 million and the market value of its risk-free debt is $60 million. The beta of the company's common stock is 0.8, and the expected market risk premium is 10%. If the Treasury bill rate is 6%, assess what is the firm's cost of capital? (Assume no taxes.) **Marks: 4**
3. A firm faces an overnight liquidity crisis and it has to payoff its current liabilities in a day. Decide whether absolute liquidity ratio or current ratio will be a better measure of this situation. Support your answer with a discussion. **Marks: 3**