**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

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

**END TERM IMPROVEMENT EXAMINATION, AUG-2022**

|  |  |  |  |
| --- | --- | --- | --- |
| Course Name | **Advanced Corporate Finance** | Course Code | **FIN 301** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS:**

1. All answers calculated on Excel must be reproduced in the answer sheet
2. In all questions, write interpretation and analysis.
3. Exam will be conducted in the IT Lab. No students should bring their laptops etc.
4. No reading materials are allowed in the exam hall as it is a closed book examination
5. **EXCEL FILES MUST BE SUBMIITED FOR EVALUATION ALONGWITH ANSWER SHEET**
6. Evaluate the importance of duration and convexity of a bond in risk management. If a bond has a duration of 7.56 years and yield increases from 5% to 5.59%, compute the change in price. What will the change if yield decreases from 6% to 5.41%? **[5 marks]**
7. Compute the value of a four-month call option on the Microsoft with an exercise price of $150. The current value of a share of Microsoft is $160. The interest rate available in the U.S. is *r* = 5%. The option maturity is 4 months. The volatility of the underlying asset is 25% per annum. What will be the value if the volatility increases to 30% and strike becomes $148.50? **[10 Marks]**
8. Companies A and B have been offered the following rates per annum on a $10 million five-year loan:

|  |  |  |
| --- | --- | --- |
|  | Fixed Rate | Floating Rate |
| Company A | 4.35% | LIBOR- 20 bp |
| Company B | 6.25% | LIBOR+ 45 bp |

Company A requires a floating-rate loan; company B requires a fixed-rate loan. Design a swap that will net a bank, acting as intermediary, 0.15% per annum and that will appear equally attractive to both companies. **[10 Marks]**

1. Juicers Inc. is thinking of acquiring Fast Fruit Company. Juicers expects Fast Fruit's NOPAT to be $9 million the first year, with no net new investment in operating capital and no interest expense. For the second year, Fast Fruit is expected to have NOPAT of $25 million and interest expense of $5 million. Also, in the second year only, Fast Fruit will need $10 million of net new investment in operating capital. Fast Fruit's marginal tax rate is 40%. After the second year, the free cash flows and the tax shields from Fast Fruit to Juicers will both grow at a constant rate of 4%. Juicers has determined that Fast Fruit's cost of equity is 17.5%, and Fast Fruit currently has no debt outstanding. Assume that all cash flows occur at the end of the year, Juicers must pay $45 million to acquire Fast Fruit. What it the NPV of the proposed acquisition?

**[10 Marks]**

1. The Red Bud Co. just paid a dividend of $1.20 a share. The company announced today that it will continue to pay this constant dividend for the next 3 years after which time it will discontinue paying dividends permanently. What is one share of this stock worth today if the required rate of return is 7%?  **[5 Marks]**