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| **C:\Users\ADMIN\Desktop\j.png** | **JAIPURIA INSTITUE OF MANAGEMENT, INDORE**  Post Graduate Diploma in Management (Batch 2022-24) |
| **Course Title: Advanced Corporate Finance, (Course Code: 40221)**  **End-Term Examination, Term - III (May, 2023)** | |
| **Time Duration : 2 Hours Total Marks: 40** | |

***General Instructions*:**

1. *The marks of each question is indicated to their right.*
2. *This exam is completely an MS -excel based exam*
3. *No answer sheet will be given*
4. *Students need to submit one excel file as an answer script. The excel file will have multiple sheets.*
5. *Students need to solve each question in a separate sheet and name the sheet with ques number.*
6. *No Internet access will be given*
7. *No formula, interest factors tables will be provided*
8. *Students should continually keep saving their work*
9. *Students should save the final excel file with their name and roll number.*
10. *Do not write anything on the question paper apart from your roll number.*

Q1. a.The bonds issued by ABC Ltd. bears a coupon of 6 percent, payable semiannually. The bond matures in 15 years and has a $1,000 face value. Currently, the bond sells at par. Calculate the yield to maturity? **[5 Marks]**

b. Jetlag Enterprises has never paid a dividend. Free cash flow is projected to be $80,000 and $100,000 for the next 2 years, respectively; after the second year, FCF is expected to grow at a constant rate of 8%. The company’s weighted average cost of capital is 12%. Calculate Jetlag’s value of operations. **[5 Marks]**

Q2. a. Sensitivity Graph for Solar Water Heater Project (Dollars in Thousands)

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| --- | --- | --- | --- | --- |
| **Data for Sensitivity Graph** | | | | |
| Deviation  from Base | NPV with Variables at Different Deviations from Base | | | |
| Equipment Cost | Price | Units | VC/Unit |
| −30% | $2,599 | −$9,852 | −$1,999 | $8,901 |
| 0% | $1,048 | $1,048 | $1,048 | $1,048 |
| 30% | −$503 | $11,949 | $4,096 | −$6,805 |
| Range | $3,102 | $21,801 | $6,095 | $15,706 |

1. From the graph and table identify which variable is the most sensitive to NPV of the project. **[3 Marks]**
2. The increase in which variables will lead to an increase in NPV and an increase in which variables will lead to a decrease in NPV. **[2 Marks]**

b.



1. What do the expected return and standard deviation indicate? **[2 Marks]**
2. If the probability for best situation is changed to 50%, base is changed to 25% and worst is kept same, calculate the value of expected NPV? **[3 Marks]**

Q3. a. Britannica Ltd., a biscuit manufacturer is concerned about the rising prices of wheat. The market price is currently at ₹50 per kg. The manufacturer is afraid of the market rising above ₹50 per kg. Keeping in mind the above situation, suggest using which derivatives and how Britannica Ltd. can hedge the risk due to the fluctuation of wheat price. **[5 Marks]**

b. A businessman has just completed transactions in America and England. He is now holding $200,000 and £100,000, and wants to convert both amounts to the euro. His currency dealer provides this quotation:

|  |  |  |
| --- | --- | --- |
|  | Bid | Ask |
| GBP/USD | 0.6488 | 0.6493 |
| USD/EUR | 1.3095 | 1.3098 |

What are his proceeds from conversion? **[7 Marks]**

Q4. ABC Corp. is analyzing the possible acquisition of XYZ Company. Both firms have no debt. ABC believes the acquisition will increase its total aftertax annual cash flow by $1.3 million indefinitely. The current market value of XYZ is $27 million, and that of ABC is $62 million. The appropriate discount rate for the incremental cash flows is 11 percent. ABC is trying to decide whether it should offer 35 percent of its stock or $37 million in cash to XYZ’s shareholders.

a. Calculate the cost of each alternative?

b. Calculate the NPV of each alternative?

c. Identify which alternative should ABC Corp. choose? **[8 Marks]**