

**R19**

**Code No: 764AG**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**MBA IV Semester Examinations, September - 2023**

**RISK MANAGEMENT AND FINANCIAL DERIVATIVES**

**Time: 3 Hours**

**Max.Marks:75**

**Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART - A**

**(25 Marks)**

- 1.a) Describe the Risk Management Levels. [5]
- b) Examine the Capital Adequacy Requirements tools. [5]
- c) Discuss the Counter party Risk in the forward contract. [5]
- d) Explain the Arbitrage Pricing Theory with illustration. [5]
- e) Describe the term Swaptions. [5]

**PART - B**

**(50 Marks)**

- 2.a) Discuss the nature and scope of Risk Management.
  - b) Describe the types of risks with suitable examples. [5+5]
- OR**
- 3.a) Elucidate the step by step process of the risk management.
  - b) Brief on risk models. [5+5]

- 4.a) Describe the terms Liquidity risk, Credit risk and Exchange risk.
- b) Examine the regulatory framework of risk management. [5+5]

**OR**

- 5.a) Compare and contrast the different types of "Interest Rate Risks".
- b) Explain different risk management tools with illustrations. [5+5]

- 6.a) Examine the impact of "Financial market imperfections," on pricing the Future contracts.
- b) Brief on commodity forward contract. [5+5]

**OR**

- 7.a) Explain the mechanism of pricing "Forward contracts".
- b) Brief on the role of expected future spot price in pricing the contacts. [5+5]

8. The following put option contracts in respect of an equity stock expire by this month end. Current market price of the stock is Rs 3400. The details of Put option contracts entered at different strike prices, different premia are given below.

Put option price (Premium in Rupees)	50	60	70	80	90
Strike Price (In Rupees)	3200	3300	3400	3500	3600

Identify; In-the-money, At-the-money, and Out-of-the-money options. Also determine intrinsic value and time value of the options at different strike prices. [10]

**OR**

- 9.a) Explain the mechanism of Binomial Option Pricing Model. [5+5]  
 b) Describe the structure of open market. [5+5]

10. M/s. Company Alpha took a loan of Rs 1 crore from M/s Axis Bank at a fixed rate Interest of 9% PA, and M/s Company Beta took a loan of Rs 1 crore from M/s Yes Bank at a floating rate Interest of "Bank rate + 2.00%". Both the companies are not happy with the present interest rate obligations. M/s Company Alpha prefer to swap its interest rate liability to a floating rate Interest of "Bank rate + 2.5%" and M/s Company Beta desires a Fixed rate Interest of 9.5%. Let us presume that both the companies approached HDFC Bank for interest rate swap.

Draw Pay off table and state the Profit or Loss to M/s Company Alpha, M/s Company Beta and M/s HDFC Bank in a year, on account of the swap deals, if the Bank rate during the 1<sup>st</sup> Quarter of the year is 8%, 2<sup>nd</sup> Quarter is 6%, 3<sup>rd</sup> Quarter is 7% and 4<sup>th</sup> quarter is 6%. (Note: Quarter = 3 months). [10]

**OR**

- 11.a) Depict the mechanism of a Currency Swap with suitable chart / diagram, and explain its benefits and limitations.  
 b) Discuss the evolution of SWAP market in brief. [5+5]

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