

Code No: 783AJ

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MBA III Semester Examinations, February - 2024

RISK MANAGEMENT AND FINANCIAL DERIVATIVES

Time: 3 Hours

Max.Marks:60

Note: This question paper contains two parts A and B. i) **Part- A** for 10 marks, ii) **Part - B** for 50 marks.

- Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.
- Part-B consists of **ten questions** (numbered from 2 to 11) **carrying 10 marks each**. Each of these questions is from each unit and may contain sub-questions. For each question there will be an "either" "or" choice, which means that there will be two questions from each unit and the student should answer either of the two questions.

**PART- A****(10 Marks)**

- Brief on structure of financial markets. [1]
- Define model risk. [1]
- What is Value at Risk? [1]
- Brief on risk weighed assets. [1]
- Define short selling. [1]
- Brief on notes and bills. [1]
- What is arbitrage? [1]
- Define Straddle. [1]
- Describe carbon credit. [1]
- Brief of equity swap strategy. [1]

**PART-B****(50 Marks)**

- What is risk Management? Enumerate its advantages and discuss the systematic and unsystematic risk with suitable example. [10]

**OR**

- Illustrate the impact of credit and counterparty risks on the financial position of a lender and illustrate the risk management process. [10]

- Elucidate the different types of Liquidity risk with suitable examples [10]
- Describe cash flow at risk and exemplify it in brief. [5+5]

**OR**

- In what way, the BASEL III norms are advanced from Risk Management perspective over BASEL I AND BASEL II accords? [10]

- What are the constituent elements of a Derivative Market? Explain them and discuss the factors influencing the growth of derivative market in India. [10]

**OR**

- A one year long forward contract of a non-dividend paying stock is entered into when the stock price is Rs 50 and the risk free rate of interest is 8% per annum, with continuous compounding.

You are required to calculate the Forward price and Initial value of the forward contract, if the price of the stock moves to Rs 60 after six months while the risk free interest remains the same. [10]

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8. A stock price is currently Rs 50. At the end of 6 months, it will be either Rs 55 or Rs 45. The risk free rate of interest is 8% per annum. What is the value of a Six month European Call option, with a strike price of Rs 48. [10]

**OR**

9.a) State the assumptions and uses of Black and Scholes option pricing model.  
b) Describe the types of options in brief. [5+5]

10.a) Depict the mechanism of a typical Currency Swap.  
b) Examine the structure of a typical interest rate swap with an example. [5+5]

**OR**

11. A Bank advised the following two customers who approached it for a term loan, either to opt for fixed rate of Interest or floating rate of Interest.

Company	Loan Amount	Repayment Period	Fixed Rate of Interest	Floating Rate of interest
A	Rs 20 Million	5 Years	6%	MIFOR + 0.25
B	Rs 20 Million	5 Years	8%	MIFOR + 0.75

Company A opted for a Floating rate loan, while company B asked for a Fixed rate loan. You are required to design a swap that will net the bank acting as intermediary 0.1% per annum and that will equally attractive to both companies. [10]

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