Printed Page:- 04 **Subject Code:- AMBAFM0413**

Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

MBA

SEM: IV - THEORY EXAMINATION (2023 - 2023)

Subject: Financial Derivatives & Risk Management

Time: 3 Hours **Max. Marks: 100**

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*

1. *This Question paper comprises of* ***three Sections -A, B, & C.*** *It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*

2. *Maximum marks for each question are indicated on right -hand side of each question.*

3. *Illustrate your answers with neat sketches wherever necessary.*

4. *Assume suitable data if necessary.*

5. *Preferably, write the answers in sequential order.*

6. *No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.*

SECTION-A 20

1. Attempt all parts:-

1-a. A forward contract : (CO1) 1

(a) Can be structured by the buyer and seller

(b) Will have the same specificaton

(c) Specification are decided by the SEBI

(d) None of the above

1-b. Which of the following derivatives product is classified as American and European (CO1) 1

(a) Forwards

(b) Future

(c) Option

(d) Swaps

1-c. In future the guarantee to fulfil the contract is given by (CO2) 1

(a) The buyer of the future

(b) The seller of the future

(c) Both the parties

(d) The clearing corporation

1-d. In November the trader feels the interest rate are reflected in future price are going to fall in the next month .What action will he take? (CO2) 1

(a) Buy near month and sell far month

(b) Buy far month and sell near month

(c) Buy near month and far month both

(d) Sell near month and far month both

1-e. A call option gives the holder the right: (CO3) 1

(a) To buy the underlying asset

(b) To sell the underlying asset

(c) To either sell or buy the underlying

(d) None of the above

1-f. Premium of Infosys call option is affected by which of the following: (CO3) 1

(a) Volatility

(b) Time to expiration

(c) Interest Rates

(d) All of the above

1-g. ________ party in a swap contract typically pays a fixed rate of interest. (CO4) 1

(a) The party with the weaker credit rating

(b) The party with the stronger credit rating

(c) The party with the liability tied to a fixed rate

(d) The party with the liability tied to a floating rate

1-h. The main difference between an interest rate swap and a currency swap is (CO4) 1

(a) An interest rate swap involves exchanging interest payments, while a currency swap involves exchanging principal amounts.

(b) An interest rate swap involves exchanging principal amounts, while a currency swap involves exchanging interest payments.

(c) Interest rate swaps are used for short-term financing, while currency swaps are used for long-term financing.

(d) There is no difference between an interest rate swap and a currency swap.

1-i. Which of the following does the most to reduce default risk for futures contracts? (CO5) 1

(a) Marking to market.

(b) Flexible delivery arrangements.

(c) High liquidity.

(d) Credit checks for both buyers and sellers.

1-j. Hedging risk for a long position is accomplished by (CO5) 1

(a) taking another long position.

(b) taking a short position.

(c) taking additional long and short positionsin equal amounts.

(d) taking a neutral position.

2. Attempt all parts:-

2.a.	Define forward contract. (CO1)	2
2.b.	Discuss hedging or locking in the price of derivatives purchase or sale.(CO2)	2
2.c.	Define the term "Option".(CO3)	2
2.d.	Define the term "SWAP Market".(CO4)	2
2.e.	Explain business risk. (CO5)	2

SECTION-B 30

3. Answer any <u>five</u> of the following:-

3-a.	Using the names of the derivative assets, describe financial derivatives and their characteristics.(CO1)	6
3-b.	Write a note on the scope of forward contract and futures contract in India.(CO1)	6
3-c.	Define the risk involved in Derivatives Contracts.(CO2)	6
3-d.	Explain the Open market operations.(CO2)	6
3.e.	Write a note on volatility and its importance in the option pricing. (CO3)	6
3.f.	State the various features of interest rate SWAP. (CO4)	6
3.g.	Explain the steps of risk assessment. (CO5)	6

SECTION-C 50

4. Answer any <u>one</u> of the following:-

4-a.	Describe the participants in the derivatives market.(CO1)	10
4-b.	Do you think that derivatives market is useful for cash market? Explain the linkage between the two.(CO1)	10

5. Answer any <u>one</u> of the following:-

5-a.	Describe the cost of carry model. (CO2)	10
5-b.	Explain the distinctions between put and call options in derivatives in detail. (CO2)	10

6. Answer any <u>one</u> of the following:-

6-a.	A call option is available at Rs 6 per share for a period of 6 months at a strike price of Rs 45 per share. The current market price of the share is Rs 40 and the rate of interest is 10%. The standard deviation for the share is 0.45. Find out whether the call is rightly priced or not using Black and Scholes model .(CO3)	10
6-b.	Explain the various strategies that a trader can use while trading in currency options.(CO3)	10

7. Answer any <u>one</u> of the following:-

7-a.	"SWAP is a private agreement between two parties in which both parties are 'obliged' to exchange some specified cash flows at periodic intervals". Explain.CO4	10
7-b.	Companies A and B both want to borrow 10 crores for 5 years and the following rates are offered: Company A - Fixed Rate 10% and LIBOR+0.3%(Floating Rate) Company B- Fixed Rate 11.2% and LIBOR+ 1%(Floating Rate)	10

Companies A requires a floating rate loan, company B requires a fixed rate loan. Design a SWAP that will equally attractive to both companies. (CO4)

8. Answer any <u>one</u> of the following:-

8-a.	Summarise the steps of risk assessment in risk management. (CO5)	10
8-b.	Various types of risks are found in business and the derivatives markets. Justify.(CO5)	10