

II MBA - II Semester-Regular Examinations – April 2019**FINANCIAL DERIVATIVES**

Duration: 3 hours

Max. Marks: 60

SECTION - A**1. Answer the following:****5 x 2 = 10 M**

- a) Define derivatives.
- b) Illustrate American option.
- c) What is option pay off?
- d) Explain Log normal property of stock prices.
- e) What do you mean by interest rate swaps?

SECTION – B**Answer the following:****5 x 8 = 40 M**

2. a) Describe the characteristics and settlement procedure of futures contract.

(OR)

b) Explain the relationship between futures prices, forward prices and spot prices.

3. a) Explain the features of various option contracts with example.

(OR)

b) Give a detailed note on any two option pricing models.

4. a) On March 20, a company X negotiated a contract to sell 2 million barrels of oil. It is agreed that the price that will apply to the contract is the price as on August 20th. Company is in a position whereby it will gain 1000 for each 1% decrease in price of oil. Suppose the spot price on March 20th is 300 per barrel and in August oil futures price on commodity exchanges is 290 per barrel. Explain how the strategy works if contract of commodity market is for delivery of 200 barrels?

(OR)

b) Explain the Strategies involved in Option with suitable example.

5. a) How the Black Schools Model is helpful to the investors? Explain.

(OR)

b) Explain the Binomial model of option valuation.

6. a) Explain the method of valuation of different types of SWAPS.

(OR)

b) Discuss the distinguishing features of Interest rate SWAP and currency SWAP.

SECTION-C

7. Case Study

1x10=10

You are back in Mumbai after a grueling day in New Delhi. You were called by the mandarins in the North Block to explain the cause of the crash in the price of the stock of your company- a leading Indian Software MNC. The investors were aghast at the stock price crash. The main charge was simple. Your company used futures trading for speculation Instead of normal hedging. Before you can get out of our Shining Merc (which might get auctioned soon) mediapersons are already all over the place thrusting microphones in your face-waiting for a sound bite. You barely mumble 'no comments' to the gathering but promise to get back with detailed description of events, to be transmitted live on the television, in a couple of hours. As you sit down at your office table, and call for a RT (room-temperature) glass of narial paanee (coconut water)-Since your friends tell that it is good when you have hyperacidity; you need a strong stomach lining to digest all the vitriol being offered to you.

When you look at the documents spread in front of you, the following details emerge:

- a) Since the exposure of your company is in USD, you chose to buy 6-month USD futures at a price that was above spot price for a long time, and you sell GBP futures for 9-months since pricing is very attractive, and you are expecting to receive payments for services rendered in about 8-months time.

- b) As the maturity of USD futures approached, US of A attacked Iraq, leading to a jump in oil prices.
- c) Sensing trouble you immediately bought 3-months interest rate futures which were trading below spot.
- d) Within a week of your purchase, markets started stabilizing and returned to normal behaviour.
- e) But your board was uncomfortable with your position, and margin calls. They ask you to settle your position and face the jury, charging you for speculation in the markets with company money.

Questions

- (i) What additional information will you need?
- (ii) How will you defend your case?