Roll No:

Mid Semester Examination

Name of the program: MBA
Name of the course: Financial Derivative

Semester: IV
Course Code: MB 403(F2)

Time: 1:30hrs
Note:

MM: 50

i) This question paper contains two sections.
ii) Both Sections are Compulsory

SECTION –A

(1 X 10=10 Marks)

1. Which of the following is true about a long forward contract
   A. The contract becomes more valuable as the price of the asset declines
   B. The contract becomes more valuable as the price of the asset rises
   C. The contract is worth zero if the price of the asset declines after the contract has been entered into
   D. The contract is worth zero if the price of the asset rises after the contract has been entered into

2. Which of the following is NOT true
   A. A call option gives the holder the right to buy an asset by a certain date for a certain price
   B. A put option gives the holder the right to sell an asset by a certain date for a certain price
   C. The holder of a call or put option must exercise the right to sell or buy an asset
   D. The holder of a forward contract is obligated to buy or sell an asset

3. The price of a stock on July 1 is $57. A trader buys 100 call options on the stock with a strike price of $60 when the option price is $2. The options are exercised when the stock price is $65. The trader's net profit is
   A. $700
   B. $500
   C. $300
   D. $600

4. A company knows it will have to pay a certain amount of a foreign currency to one of its suppliers in the future. Which of the following is true
   A. A forward contract can be used to lock in the exchange rate
   B. A forward contract will always give a better outcome than an option
   C. An option will always give a better outcome than a forward contract
   D. An option can be used to lock in the exchange rate

5. A short forward contract on an asset plus a long position in a European call option on the asset with a strike price equal to the forward price is equivalent to
   A. A short position in a call option
   B. A short position in a put option
   C. A long position in a put option
   D. None of the above

6. Which of the following best describes a central clearing party
   A. It is a trader that works for an exchange
   B. It stands between two parties in the over-the-counter market
   C. It is a trader that works for a bank
   D. It helps facilitate futures trades

7. A company enters into a short futures contract to sell 50,000 units of a commodity for 70 cents per unit. The initial margin is $4,000 and the maintenance margin is $3,000. What is the futures price per unit above which there will be a margin call?
   A. 78 cents
   B. 76 cents
   C. 74 cents
   D. 72 cents

8. A hedger takes a long position in a futures contract on a commodity on November 1, 2012 to hedge an exposure on March 1, 2013. The initial futures price is $60. On December 31, 2012 the futures price is $61. On March 1, 2013 it is $64. The contract is closed out on March 1, 2013. What gain is recognized in the accounting year January 1 to December 31, 2013? Each contract is on 1000 units of the commodity.
   A. $0
   B. $1,000
   C. $3,000
   D. $4,000

9. The frequency with which futures margin accounts are adjusted for gains and losses is
   A. Daily
   B. Weekly
   C. Monthly
   D. Quarterly

10. A limit order
   A. Is an order to trade up to a certain number of futures contracts at a certain price
   B. Is an order that can be executed at a specified price or one more favorable to the investor
   C. Is an order that must be executed within a specified period of time
   D. None of the above

SECTION –B

Note:

i) Answer all the questions by choosing any one of the sub questions.

ii) Each Question Contains three sub parts A, B & C. Attempt any one part of choice A & B from each question and part C is compulsory of each question.

Q2. **(2 X 10=20 Marks)**

A) Explain carefully the difference between selling a call option and buying a put option?

OR

B) A trader enters into a short cotton futures contract when the futures price is 50 cents per pound. The contract is for the delivery of 50,000 pounds. How much does the trader gain or lose if the cotton price at the end of the contract is (a) 48.20 cents per pound; (b) 51.30 cents per pound?.

C) At the end of one day a clearing house member is long 100 contracts, and the settlement price is $50,000 per contract. The original margin is $2,000 per contract. On the following day the member becomes responsible for clearing an additional 20 long contracts, entered into at a price of $51,000 per contract. The settlement price at the end of this day is $50,200. How much does the member have to add to its margin account with the exchange clearing house?

Q3. **(2 X 10=20 Marks)**

A) What is meant by LIBOR and LIBID? Which is higher?

OR

B) A trader sells a put option with a strike price of $40 for $5. What is the trader's maximum gain and maximum loss? How does your answer change if it is a call option?

C) The current price of a stock is $94, and three-month call options with a strike price of $95 currently sell for $4.70. An investor who feels that the price of the stock will increase is trying to decide between buying 100 shares and buying 2,000 call options (20 contracts). Both strategies involve an investment of $9,400. What advice would you give? How high does the stock price have to rise for the option strategy to be more profitable?