June 2018

Master of Business Administration (MBA) Examination

IV Semester

Financial Engineering and Risk Management

Time : 3 Hours] [Max. Marks : 80

Note: Attempt any four questions from Section A (All questions carry 15 marks each) and Section B is compulsory and carries 20 marks.

Section A

1. (a) What are the different types of financial derivatives ? Explain their features in brief.

   (b) Explain the different categories of traders in the derivatives market.

2. (a) What is a credit default swaps ? What are the features of a credit default swaps ? Discuss.

   (b) What are the various motivations underlying swaps contract ?

3. (a) Discuss the different types of risk which can be considered relevant to particular derivatives transaction.

   (b) How would you determine the exposure of the cash position to potential losses ?

4. Critically appraise the factors which determine the theoretical value of options highlighting any problems that might be encountered in incorporating them in a formal evaluation model.

5. (a) "Stock index futures are an inexpensive and highly liquid short-term alternative to speculating on the stock market." Comment.

   (b) Discuss various characteristic features of futures contracts. What is the role of clearing corporation in trading of such contracts ?

6. "Companies with the high credit risk are the ones that can not access fixed rate market directly. They are the companies that are most likely to be paying fixed and receiving floating in an interest rate swaps." Do you think it increases or decreases the risk of a financial institution's swaps portfolio ? Assume that companies are more likely to default when interest rates are high. "

7. Write a short notes on any three of the following :

   (a) Black Scheole Model

   (b) Calendar and Diagonal Spread

   (c) Convergence Clearing Process

   (d) Over the Counter Exchange.

Section B

8. A futures contract is available for petrol at $ 28 per barrel. Each contract is for 100,000 barrel. You have contracted for 8 long futures. The contract is entered into on 15th June 2003, and expires on June 30, 2003. the initial margin is 10% of the contract value and maintenance margin is 75% of the initial margin. You have to prepare a statement of marking to market showing.

   (a) Daily Loss Gain

   (b) Margin Account Balance

   (c) Margin Call.

   The closing $ prices of petrol per barrel in the spot market on various days are as follows :

June 16	28.50	June 24	26.10
June 17	31.00	June 25	26.70
June 18	33.00	June 26	25.95
June 19	29.00	June 27	25.45
June 20	28.25	June 28	25.15
June 21	27.55	June 29	25.75
June 22	26.50	June 30	24.90
June 23	26.45		

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