

**EXECUTIVE MASTER OF BUSINESS
ADMINISTRATION (EXMBA)**

Term-End Examination

December, 2013

**MCTE-089 : FINANCIAL ENGINEERING AND
RISK MANAGEMENT**

Time : 3 hours

Maximum Marks : 100

Note : Attempt any five questions. All questions carry equal marks.

1. How are multiple year holding stock prices estimated with two stage and three stage growth models ?
2. Discuss the procedure for calculating the value of a call option as per the Black and Scholes model. What assumption underline the Black and Scholes model ?
3. Describe a future contract and explain the mechanics of future trading, highlighting the concept of margin.
4. What is duration and how is it calculated ? Discuss the important characteristics of duration and explain how volatility of a bond is related to its duration ?
5. What are 'structured products' ? Discuss the investors (buyers) and issuers (sellers) motivation in buying and selling these kinds of financial securities.

6. What is credit risk ? Discuss the use of various credit derivatives to mitigate the credit risk.
 7. Explain the concept of risk adjusted performance measurement and explain the Sharepe and Treynar measures.
 8. What is the purpose of portfolio protection ? Briefly explain the concept of dynamic hedging.
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