Seat No.: __________ **Enrolment No.____________**

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA Semester –IV Examination Dec. - 2011

Subject code: 840203 **Date: 19/12/2011**

Subject Name: Risk Management (RM)

Time: 02.30 pm – 05.30 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Explain the term 'Financial derivative'. What are the important features Explain with suitable examples.	**07**
	(b)	"Options and futures are zero sum games". Critically explain the statement.	**07**
Q.2	**(a)**	Explain carefully differences between hedging, speculation and arbitrage in the context of financial derivatives.	**07**
	(b)	Suppose that on January 1, price of Reliance share is Rs. 450 and two parties enter into a forward contract for delivery of 1000 shares of Reliance on April 15 at a price of Rs. 460. Find out the profit/ loss of seller(short position) if the price of Reliance share turns out to be (i) Rs. 470 (ii) Rs. 400 on April 15.	**07**
		OR	
	(b)	Suppose that Ramesh enters into a 6 month forward contract on non-dividend paying stock when stock price is Rs. 30 and risk free interest rate is 12% per anum. Calculate forward price.	**07**
Q.3	**(a)**	Explain the regulatory framework of futures trading in India.	**07**
	(b)	In the month of September, the price of December pepper is Rs. 9500 per quintal. While the spot rate is Rs. 7950 per quintal, the carrying cost per quintal for 3 months is Rs. 1000. How the market participant can take advantage of above transactions?	**07**
		OR	
Q.3	**(a)**	Explain the concept in context of options (i) ITM,ATM and OTM (ii) Intrinsic value and Time value	**07**
	(b)	Why is a option writer is required to post margin while an option buyer normally is not? Discuss.	**07**

Q.4	**(a)**	"Option writer has limited profit and unlimited losses whereas option buyer has limited losses and unlimited profits." critically evaluate the statement.	**07**
	(b)	(i) Explain a long position in call option (ii) Also explain a long position in put option.	**07**
		OR	
Q.4	**(a)**	The stock price of ACC Ltd. In spot market is Rs. 450 and the two month option contract is of Rs. 450. The price of the option is Rs. 20 per share. At what price the option will be ATM, ITM and OTM for a call option.	**07**
	(b)	Compare between forward, future and option.	**07**
Q.5		Using the given data calculate the value of a call option as per Black Scholes model.	**14**

Stock Price	Rs. 50
Months to expire	3 months
Risk free rate of interest	10% p.a.
Standard deviation of stock	40%
Exercise price	Rs. 55

OR

Q.5		Write short notes on: (i) Long straddle (ii) Short straddle (iii) Two ways in which a bearish spread can be created (iv) Features of diagonal spread	**14**

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