BRAINWARE UNIVERSITY

Course – MCOM

Risk Management and Derivatives (MCM404A)

(Semester – 4)

Time allotted: 3 Hours **Full Marks: 70**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Question) 10 x 1 = 10

1. *Choose the correct alternative from the following*

(i) Situation in which large portion of majority is borrowed from broker of investor is classified as

a. future investment
b. forward investment
c. leveraged investment
d. non-leveraged investment

(ii) Type of contract which involves future exchange of assets at a specified price is classified as

a. future contracts
b. present contract
c. spot contract
d. forward contract

(iii) Who are the players in Future Market?

a. Speculators
b. Hedgers
c. Arbitragers
d. All of them

(iv) Example of derivative securities is

a. return backed security
b. mortgage backed security
c. cash flow backed security
d. interest backed security

(v) If Buy Call and Put Option are made at different exercise prices is known as

a. Strangle
b. Straddle
c. Hedging
d. None of the above

(vi) Using futures contracts to transfer price risk is called

a. diversifying
b. arbitrage.
c. speculating.
d. hedging.

(vii) Hedging a long position in jet fuel by a short position in crude oil, is an example of

a. Long Hedge
b. Short hedge
c. Cross Hedge
d. None of the above

(viii) Gains and losses on future positions are settled

a. by signing promissory notes
b. each day after the close of trading
c. within five business days
d. through Demat account insta cheques

(ix) If price increases over a life of a future contract, it is a case of

a. Normal backwardation
b. Contango
c. Both of the above
d. None of the above

(x) The futures contracts are marked-to-market on a

a. Daily basis
b. Weekly basis
c. Monthly basis
d. None of the above

Group – B

(Short Answer Type Questions) 3 x 5 = 15

Answer any *three* from the following

2. What do you mean by "In-the-money" and "Out-of-the- money"? [5]
3. What are the advantages & disadvantages of Hedging? [5]
4. What are the different types of Business Risks? Explain them. [5]
5. Calculate the value of call if the spot price is Rs. 30/-, exercise price is Rs. 25, time to expiry is 3 months, risk free rate of return is 5% and the standard deviation of return is 0·45. [5]
6. Define Long & Short Positions. [5]

Group – C

(Long Answer Type Questions) 3 x 15 = 45

Answer any *three* from the following

7. A Wheat farmer in order to protect himself from price fluctuations sells 15 futures contracts of 5000 bushels each at the rate of Rs. 9·00 per bushel. At the time of harvest which is five months from now, the basis is – 0·15 and the price of wheat per bushel is Rs. 9·50. Did the farmer gain or lose and by how much amount? [15]
8. Briefly explain the Black-Scholes Model. [15]
9. Briefly explain with example the Binomial Option-Pricing Model. [15]

10 Discuss in brief the emerging issues in Indian Derivative Market. [15]

11 (a) What do you understand by Volatility? Give example. [8]

(b) What is Var? Explain it with example. [7]