AT–1451

M.B.A. Semester—IV Examination
FINANCIAL DERIVATIVES
Paper—MBA/4103/F

Time : Three Hours]   [Maximum Marks : 70

Note :— (1) Attempt ALL questions.

(2) Figures to the right indicate marks.

(3) Use of scientific calculator is permitted.

SECTION—A

1. (a) "The changing nature of financial industry, especially reflected in developments in the financial derivatives market, provides considerable opportunities for risk sharing." What action can be taken to control or plan for these risks ? Can value be produced through risk management strategies ? Explain.   14

OR

(b) "The basic purpose of derivatives instruments is to provide commitments to prices for future dates for giving against adverse movement in future prices." Discuss and critically examine the statement.   14

SECTION—B

2. (a) 'Forward contracts act as forerunners of future market'. Critically evaluate the statement in the light of growth of forward market world wide.   7

(b) Suppose that on March 1 two parties enter into a forward contract for a delivery of 200 troy ounces of gold on August 1 at a price of $ 550 per ounce. What will be profit/loss to the entry (long forward price), if the price of gold on August 1, turns out to be $ 7000 per ounce ?   7

OR

(c) Discuss the concept of valuation of forward contract in detail with suitable illustration.   7

(d) Suppose on January 10, Manoj enters into a contract (forward) with Amar in which he agrees to buy 1000 shares of TVS motor company on July 1 at Rs. 950 per share. On April 1 Manoj decided to get out of his position. He enters into a forward with Chandesh in which he agrees to sell 1000 shares to TVS Motor Company on July 1 for Rs. 1000 per share. Show the position of Manoj on July 1, 2013.   7

3. (a) What do you understand by the term 'margin'? Discuss various types of margins with the help of suitable examples.   7

   (b) XYZ Ltd., expects to receive a payment of 10,00,000 £ after 3 months. The £ is currently worth $ 1.60 but the three months future price is $ 1.56. XYZ expects the price of the £ to decline (value of dollar will rise). If this expectation is fulfilled, XYZ will suffer a loss when £ are converted in dollars when you receive them three months in future. Calculate :

      (i) Given a current price, what is expected payment in dollars ?

      (ii) Given the future price, how much XYZ Ltd. will receive in dollars ?

      (iii) After 3 months pound is worth $ 1.38 what is profit or loss to XYZ Ltd. ?   7

                                    OR

   (c) Explain the role of clearing house with special emphasis upon 'delivery mechanism' in future market.   7

   (d) A share of Dish TV is currently available at Rs. 100. The risk-free rate of interest is 8.5% compounded continuously. The share is expected to yield a dividend of Rs. 2.50 in 1 month from now. Determine the value of 3-months future contract if one contract involves 2000 shares.   7

SECTION—C

4. (a) "Plain Vanilla SWAP is simplest form of interest rate SWAP contract available in interest rate SWAPS market." Discuss with a suitable example.   7

   (b) Explain the mechanism of interest rate SWAP with the help of suitable example.   7

                                    OR

   (c) What are the various types of currency SWAP ? Explain their structure also.   7

   (d) Explain the concept of equity SWAP and what are the advantages of equity SWAP ?   7

SECTION—D

5. Option on ABC 500 :

   Stock price = Rs. 120

   Exercise price = Rs. 100

   Exercise date = 6 months

   Estimated standard deviation = 30%

   Current Market price = Rs. 28

   Risk free return = 8% p.a.

   Calculate the price of a Call and Put options of the Stock as per Black-Scholes model.   14