# M.B.A. (Semester—IV) Examination FINANCIAL DERIVATIVES Paper—MBA/4103/CGF

Time: Three Hours | Maximum Marks: 70

Note:—(1) Attempt ALL questions.

- (2) Figures to the right indicate marks.
- (3) Use of factor table, scientific calculator is allowed.

## SECTION-A

 (a) Discuss the history of derivative market in India. Also explain the regulatory framework of financial derivatives.

### OR

(b) The derivative markets have become an integral part of modern financial system in less than two decades of their emergence. In the light of above statement detail out the concept of financial derivatives along with the major products and players in the market.

## SECTION-B

- 2. (a) Describe Forward contract and bring out the difference between long forward position and a short forward position with suitable example.
  - (b) Suppose on 15th March, 2013, the price of SBI share in cash market is Rs. 350 per share, X enter into on forward agreement with Y to buy 1500 shares of SBI at agreed price of Rs 370 per share on April 15, 2003. Find out the profit profile of X, if price of SBI on April 15, 2003 turns to be 450 in spot market.

#### OR

- (c) Discuss the pricing mechanism of forward contracts.
- (d) Consider a six-month long forward contract of a non-income paying security. The risk free rate of interest is 6% p.a. The stock price is Rs. 30 and the delivery price is Rs. 28.
  Compute the value of forward contract.
- 3. (a) Explain how margins protect investors against the possibility of default.
  - (b) Suppose an amount of Rs. 200 invested for 1 year at an interest rate of 10% p.a. If the rate is compounded twice a year, and reinvested, what will be the terminal value of the investment?

#### OR

- (c) "If future prices of an asset is greater than spot price during delivery, it attracts arbitrage opportunity." Comment.
- (d) Consider the position of an investor who shorts 1000 TISCO shares in May when the price per share is Rs. 100 and closes out the position by buying them back in August when the price per share is Rs. 80. Suppose that a dividend of Rs. 2 per share is paid in June, what will be the gain/loss to the investor?

(Contd.)

7

7

# SECTION-C

- 4. (a) What do you understand by options? Explain its significance in financial markets.
  - (b) Discuss the concept of 'In-the money'. 'At-the money' and 'Out-of the money' option.

-7

OR

(c) "Options are the safest instruments for the investors." Examine the statement critically.

7

(d) "Options writer has limited profit and unlimited losses." Critically evaluate the statement with illustration.

# SECTION-D

- 5. XYZ Ltd. wishes to borrow Rs. 20 crore at a fixed rate for 5 years and has been offered either 11% fixed or six-month LIBOR + 1%. ABC Ltd. wishes to borrow Rs. 20 crore at a floating rate for 5 years and has been offered either six-month LIBOR + 0.5% or 10% fixed. On the basis of above figures:
  - (a) How may they enter into swap arrangement in which each benefits equally?
  - (b) What risk may this arrangement generate?

[4