AU–1643

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

1. (a) Hedgers, Speculators and Arbitrageurs are the main players in the derivative market. Describe the role of each player depending upon the purpose they choose to enter in derivatives. 14

OR

(b) Discuss the various financial derivative instruments traded in organised exchange in Indian Financial markets. Also describe the trading mechanism. 14

SECTION–B

2. (a) "Forward contracts are used to manage financial risk regarding selling or buying of an asset in derivative market". Comment. 7

(b) A long forward contract on a non-dividend-paying stock has 6 months to mature. The risk-free rate of interest is 10% p.a., the stock price is Rs. 25 and the delivery price is Rs. 24. Calculate the value of forward contract. 7

OR

(c) How a forward contract works ? Explain with appropriate example. 7

(d) Suppose that on Jan 1, two parties enter into a forward contract for delivery of 1200 shares of Colgate Ltd. on June 1 at a price of Rs. 550 per share. What will be the profit/loss to the party (Long forward price) if the price of share on June 1 turns out to be Rs. 700 ? 7

3. (a) Define Future contract. Also explain how it is different from forward contract. 7

(b) Suppose an investor enters into futures (short) contract to sell shares of ABC Ltd. for Rs. 50. The size of contract is 5000 shares. Initial margin is Rs. 40,000 and maintenance margin is Rs. 30,000. What price change will lead to margin call ? If investor does not deposit margin call what will happen ? 7

OR

(c) "For an asset where future prices are usually less than spot prices, long hedges are likely to be more attractive". Explain this statement. 7

(d) On December 15 XYZ Ltd. establish a long position in 200 shares of CIPLA on Dec. 21 at a futures price of Rs. 600 per share. Initial margin is Rs. 30,000 and maintenance margin is Rs. 20,000. Draw a table showing margin and marking-to-market for XYZ Ltd. on 21, Dec. Use following information :

Date : December :	15	16	17	18	19	21
Future price (Rs.) :	600	550	650	600	605	590

7

SECTION–C

4. (a) Explain the concept of Black and Scholes model, with their assumptions. 7

(b) "Option buyer has limited loss and unlimited profit". Critically examine the statement with suitable example. 7

OR

(c) What are the important terms used in options contract ? Explain with example. 7

(d) "Option position involves two sides, one is the investor with long position and another with short position". Explain the statement considering features of options contract. 7

SECTION–D

5. Company X and Y both wish to borrow Rs. 10 crore for 5 years. Company Y wants to arrange a floating rate loan. The rate of interest is six-month LIBOR. Company Y wants to arrange a fixed rate loan. They have been offered the following terms :

	Fixed rate	Floating rate
Company X	10.0%	Six-month LIBOR+0.3%
Company Y	11.2%	Six-month LIBOR+1.0%

Show the transaction :

(i) Without intermediary &

(ii) With intermediary. 14