Registration No :

Total Number of Pages : 02

MBA / MBAP

18MBA302B / 18PTMBA501B

3rd & 5th Semester Regular / Back Examination: 2021-22

FINANCIAL DERIVATIVES

BRANCH(S): BA, FM, GM, HRM, IB, MBA, MBA (M & F), MM / MBA(PT)

Time : 3 Hour

Max Marks : 100

Q.Code : OF559

Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.

The figures in the right hand margin indicate marks.

Part-I

Q1 Answer the following questions : **(2 × 10)**

a) What is counterparty risk?

b) What is an Open interest?

c) What are ITM, ATM and OTM?

d) What are covered option and naked option? Explain with example.

e) You saw the following quote in Derivative Market.
"RIL(300),2500, Aug21, Call AM Rs15"
Explain what do you mean by that.

f) What is hedging effectiveness?

g) What is basis?

h) What is swap? What type of derivative instrument it is?

i) What are the three different styles of Options? Explain

j) How is put buyer different from short seller?

Part-II

Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve) **(6 × 8)**

a) Bring out the distinction between over the counter derivatives and Exchange traded derivatives.

b) Who are the participants in derivative market? Explain their roles.

c) How are futures trades settled in the stock market?

d) The following data relate to the Futures Contract.
Gold Futures Contract size =100gms
Investor buys one December Gold Futures contract on 1 November at Rs400 per gram.
Initial Margin is 10% and Maintenance Margin is 75% of initial margin.
Set up a Buyer's Margin Account assuming the closing price of Gold /gm as ; Rs. 400, 403, 398, 390, 392, 387, 394, 401, 405 and 410 for next 10 consecutive trading days.
Also find the profit .

e) What is intrinsic value of a call option? How is it calculated?

f) What is FRA? Explain the concept with an example.

g) Given the following data, find at what forward rate, will there be no arbitrage gain possible?
Rs22/DM (SPOT), 6 month interest rates: Re 11.5% per annum and DM 6.5% percent per annum.

h) What do you mean by Fair price of a Forward contract?
Calculate the Fair Price of a Forward Contract based on the following data:
Current Price of Asset (S_0) = Rs 5.00 lakhs. Risk free return is 5% per annum.
Time to expiration (T) is 6 months.

i) KK is bearish about the share of DLF. He expects the price to fall to Rs50 from current market price of Rs200 in 3 months. He wants to sell the shares. Again he thinks, if it rises beyond Rs200, he might lose. He approaches a broker. Broker advises him to buy a Put option as follows:
"DLF (1100) 180 June22,Put Am Rs25"
Suppose May22 Spot Price of DLF is Rs90 and KK exercises his option, Will he gain? If yes, How much?

j) Current Market Price of a stock is Rs100. Strike Price (X) is 115, t=12 months. Spot price may increase by 60% or decline by 20% of the current market price. Risk free rate is 10% per annum. Find the Call price and Put price.

k) Explain the Straddle strategies.

l) Write a note on Black-Scholes option pricing model.

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 Discuss the factors responsible for the growth of derivative market in India. **(16)**

Q4 An investor has a portfolio of Rs30,00,000 consisting of the following stocks: **(16)**

Stocks	Value (Rs)	Beta
Infosys	10,00,000	0.97
L&T	12,00,000	1.24
ICICI	8,00,000	1.52

Q5 Current NIFTY level is 16,000 and Nifty Futures lot is 15. Calculate the number of contracts required for hedging when Beta is 0.75 **(16)**
Explain the nature of Equity derivative instruments such as:

a) Equity Index Futures and Equity stock Futures
b) Equity Index Options and Equity Stock Options with clear examples.

Q6 Explain Bull Spread and bear spread with clear examples. Put neat diagrams wherever necessary. **(16)**