(2½ Hours) **[Total Marks: 75]**

Instructions:
All questions are compulsory.
Figures to right indicate full marks.
Use of Scientific Calculator is not allowed.

Q 1) A) Match the columns. (Any Eight) **(8)**

Column A	Column B
1. Swap Contract	A. IN-THE-MONEY
2. OTC	B. Vega
3. Future Contract	C. Exercise on or before expiry date
4. American Option	D. Market order
5. ITM	E. Paid
6. Premium to option buyer	F. Market price where in party-to-party negotiate contract
7. Option Greek	G. Agreement to exchange cash flow
8. Types of order	H. Setting position limits based on margin
9. Risk Management	I. Avoids risk of loss
10. Hedgers	J. Standard in nature

Q 1) B) State whether true or false. (Any Seven) **(7)**

1. Securities Contract (Regulation) Act gives the definition of derivatives in India.
2. Futures and Options are settled through clearing house.
3. Contango can be also refers to as positive Basis.
4. Short is position to buy the contract.
5. Mark to market is not the type of margin.
6. Hedging helps to minimize the risk.
7. Short Strangle is a neutral strategy where 1 call option and 1 put option of same expiry date but different exercise price are sold.
8. BSM model of option pricing is not given by Fischer Black and Myron Scholes.
9. Theta = (change in option delta / change in underlying asset)
10. Full form of SPAN is **"Standard Portfolio Analysis of Risk"**

Q 2) a) Define derivatives. Explain its functions. (8)
Q 2) b) What are the recommendations of LC Gupta Committee? (7)

OR

Q 2) c) Who are the participants in derivatives market. (8)
Q 2) d) Difference between OTC and ETC Contract. (7)

TURN OVER

Q 3) a) Explain the following Terminologies. (8)

1. Contract Date
2. Cost of Carry
3. Spot Price
4. Intrinsic Value

Q 3) b) An investor took two positions in future which are as follows: (7)

1. Sold future contract of M/s Tina Ltd. with a lot size of 100 shares at Rs. 2, 400 & at expiry it closed at Rs. 2, 401.
2. Bought future contract of M/s Reena Ltd. with a lot size of 500 shares at Rs. 180 and at expiry it closed at Rs. 175
   Calculate Net Profit and Loss

OR

Q 3) c) Ram sold July HPCL future at Rs. 1, 709. At expiry it closes at Rs. 1, 650. (8)
Lot size is 100. Find the profit or Loss. Also draw the payoff for the same.

Q 3) d) Draw the payoff of Short Call (7)

Q 4) a) Explain Option Greeks. (8)

Q 4) b) Anil writes (or sells) calls of Infosystech Ltd. with strike price of Rs. 3, 350. He receives premium of Rs. 50 per call. A month later the stock trades in the market at Rs. 3, 320. Calculate the profit and loss for option of lot size 100. (7)

OR

Q 4) c) The share is currently available for Rs. 100. Expected underlying asset price will be either up by 25% or down by 20% in each of the future period. The exercise price of a call option is Rs. 110. The risk free interest rate is 7%. Draw a Binomial tree (single period). (8)

Q 4) d) Explain the mechanism of clearing system in Derivatives markets. (7)

Q 5) a) Which are the different types of orders in derivatives market? (8)

Q 5) b) Write a short note on settlement of Futures and option contract. (7)

OR

Q 5) **Write short notes (any three)** (15)

1. Types of derivatives
2. Features of future contract
3. Straddle
4. Cash & Carry Arbitrage
5. Factors affecting option contract
