Duration: 2 ½ Hours **Marks: 75**

NOTE: - 1. All Questions are compulsory (15 marks each).
2. Figures to the right indicate full marks.
3. Use Simple calculator.

Q.1. [A] Multiple Choice Questions: **[Attempt any 8]** (8)

1. ______ take high risk in trading with pure intention of making profits.
a. Hedgers b. Arbitrageurs c. Speculators d. Market Makers
2. The performance of derivatives depends on the movement in the prices of ________.
a. Underlying assets b. Outstanding expenses c. Market Capitalisation of company
d. Earning Per Share
3. Future trade of Rice started 6000 years ago in ______.
a. India b. Japan c. China d. UK
4. ______ is the fixed quantity of contract traded in stock exchange.
a. Margin b. Lot Size c. Mark to Market d. Call
5. In _____ contract, buyer gets the right to cancel contract in case of loss.
a. Future b. Forward c. Options d. Swaps
6. Basis is the difference between Spot price and _______ price.
a. Spot b. Market c. Future d. Contract
7. _______ option can be exercised any time before or on maturity.
a. American b. European c. Bermudan d. Call
8. Taking long position means to _________ the contract.
a. Buy b. Sell c. Write d. Short
9. _______ shows change in Volatility of option prices.
a. Delta b. Gamma c. Vega d. Theta
10. ________ says that future and spot prices becomes same on the day of expiry.
a. Convergence b. Basis c. Basis risk d. Cost of carry

Q.1. [B] Write whether statements are True or False: **[Any 7]** (7)

1. Forward Contracts are traded in over the counter market.
2. Future contracts have low liquidity in market.
3. Time Value of option contract can never be negative.
4. Option seller pays the premium to buyer.
5. Put contract gives right to buy the contract.
6. Full form of SPAN is Standard Portfolio Analysis of Risk.
7. More than one Beta shows high risk in the portfolio of investor.
8. Standard Deviation measures the deviations between Current returns and expected average returns.
9. NSCCL is a wholly owned subsidiary of NSE.
10. The Black –Scholes model is used to price European option contract.

Q.2. [A] Describe characteristics of derivative market. (8)

[B] Distinguish between future and forward contract. (7)

OR

Q.2. [C] Explain the risks involved in derivative market. (8)

[D] What are the terminologies used in future trading. (7)

Q.3. [A] An investor took two positions in future, which are as follows: (8)

a) Sold 4 future contract of HDFC Bank with a lot size of 500 shares at Rs. 450 and at expiry it closed at Rs. 380.

b) Bought 5 future contract of SBI Bank with a lot size of 1,000 shares at Rs. 650 and at expiry it closed at Rs.590.

Find the amount of Net Profit or Loss for both the positions.

[B] Write characteristics of Forward Contract. (7)

OR

Q.3. [C] Mr. Shivam has taken a short position in 3 months March future contract of Wipro Ltd. with a lot size of 250 shares trading at Rs. 2,360. Show profit or loss of Mr. Shivam if the spot prices on expiry range in following form: (8)

a) Rs. 1,970
b) Rs. 2,540
c) Rs. 2,630
d) Rs. 2,280

[D] Which all factors affects option premium? (7)

Q.4. [A] Mr. Aditya bought a call contract of Tata Steel Ltd. At the price of Rs. 270 with a Premium of Rs. 10. Calculate profit or loss of of Mr. Aditya if price on the day of expiry variate in the range of Rs. 230, Rs. 240, Rs. 250, Rs. 260, Rs. 270, Rs. 280, Rs. 290, Rs. 300. (8)

[B] On 20th November, 2022, price of ITC Ltd. is Rs. 1,520. Miss Pooja is willing to take up long position in 2 month option expiring on 19th January, 2022. From the following data calculate Intrinsic Value, Time Value and Moneyness of option contract. (7)

Sr. No.	Call Strike Price	Call Premium	Put Strike Price	Put Premium
1	1570	60	1590	140
2	1520	110	1520	120
3	1480	130	1470	80

OR

Q.4. [C] Explain assumptions of Binomial Option pricing model. (8)

[D] If cost of 10 grams of gold in the spot market is Rs. 32,000 and the locker rent for storing gold is Rs. 400 for 2 months, interest is Rs. 220 and interest rate is 12% p.a. What is the fair value of 2 months future contract? (7)

Q.5. [A] Explain following terminologies: (8)

a) VaR
b) Stop Loss Order
c) Swap contract
d) In The Money option

[B] State the types of Margins in derivative trading. (7)

OR

Q.5. [C] Write Short Notes on **[Attempt any 3]** (15)

1. Types of trade orders
2. Advantages of Future contract
3. Vega and Theta Option Greeks
4. Index Futures
5. Hedging

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