

Dt :- 13/12/22

2½ Hours

Marks : 75

**Note:**

1. All questions are compulsory. ( Subject to internal Choice )
2. Figures to the right indicate full marks.
3. Use of non-programmable calculator, is allowed and mobile phones are not allowed.
4. Support your answers with diagrams / illustrations, wherever necessary

**Q1) A Choose the correct alternative ( Any 8 out of 10 ) (08)**

- 1 A contract between a buyer and a seller entered into today regarding a transaction to be fulfilled at a future point in time is called \_\_\_\_\_  
A) Fixed contract B) Derivative contract C) Forward contract  
D) Future contract
- 2 Speculators who neither buy nor sell securities in the market but still trade on them are called \_\_\_\_\_  
A) Wolves B) Stags C) Bears D) Mice
- 3 An option exercised at the time of maturity it is termed as \_\_\_\_\_  
A) American option B) European option C) Call options D) South American Option
- 4 Financial \_\_\_\_\_ are mainly used for hedging risk.  
A) Derivatives B) Speculators C) Investors D) Stocks
- 5 Elimination of riskless profit opportunities in the futures market is \_\_\_\_\_  
A) diversification. B) Arbitrage. C) Speculation D) Hedging.
- 6 An option allowing the owner to sell an asset at a future date is a \_\_\_\_\_  
A) Put option B) Call option C) Forward option D) Future contract
- 7 An option holder is said to take a \_\_\_\_\_ position.  
A) Long B) medium C) short D) close
- 8 \_\_\_\_\_ order is used to limit loss on a trade.  
A) Immediate or cancel B) Stop loss C) Daily D) Formal
- 9 \_\_\_\_\_ clearing member is not a trading member.  
A) Self B) Professional C) Amateur D) Expert
- 10 For liquid securities, the VaR margins are based on the \_\_\_\_\_ of the Security.  
A) volatility B) returns C) liquidity D) exposure limit

**Q1) B State whether True or False ( any 7 out of 10 ) (07)**

- 1 Both parties have specified obligation under derivative contract.
- 2 Futures are traded on OTC.
- 3 If the price of the underlying moves according to the speculators expectation they make small profits.
- 4 Index options have index as underlying.
- 5 Derivatives are mostly primary market instruments.
- 6 Bid price is the price the buyer is willing to pay.
- 7 Under calendar spread we buy options with different expiry at the same strike price.

- 8 Higher volatility in price of underlying asset will lead to higher option premium.
- 9 Monte Carlo Method take a lot of computational power and hence longer time to estimate results.
- 10 The National Securities Clearing Corporation Ltd. (NSCCL) assumes the counterparty risk of each member and guarantees financial settlement.

Q2 A Discuss the Participants in derivative market (08)

Q2 B What is Commodity Market? Explain the reasons for investing in commodities (07)

OR

Q2 C Distinguish between Forward & Futures (08)

Q2 D Write note on different types of derivatives traded in India (07)

Q3 A Explain the following Terminologies: (08)

- i. Tick Size
- ii. Contract Cycle
- iii. Initial Margin
- iv. Lot Size

Q3 B Elaborate the concept of Convergence (07)

OR

Q3 C The spot price of gold is Rs 39,000. The locker rent is Rs 500 and insurance charges are Rs 750. Interest rate on borrowed funds is 12% pa compounded on monthly basis. What will be the fair value of 3 months futures contracts? (08)

Q3 D An investor takes the position in the futures market through the following transaction: (07)

- i. Buys 10 contracts on Hindalco Ltd at Rs 5,500 with a lot size of 200 which expires at a final settlement price of Rs 5,800.
- ii. Sells Vedanta 7 contracts at Rs 855 with a lot size of 100 which expires at Rs 825.

Determine the net profit or loss for the investor from both the positions. Also draw pay off diagrams for the respective positions.

Q4 A What are the factors affecting the option premium? (08)

Q4 B What is Binomial option Pricing Model? What are its advantages and disadvantages? (07)

OR

Q4 C IRCTC Futures trade on NSE as one, two- and three-month's contracts. Money can be borrowed at 16% pa. What will be the price of one unit of new two months futures contract on IRCTC, if no dividends are expected during the two months period assuming spot price of the IRCTC is Rs 3,770? (08)

Q4 D Justin buys a call option of Texas Ltd at an exercise price of Rs 600 with a premium of Rs 30. Calculate the profit or loss on the option position for Justin if the spot price on expiry is as follows: Rs 580, Rs 590, Rs 600, Rs 610, Rs 620, Rs 630, Rs 640, Rs 650, Rs 660, Rs 670. Also draw the payoff diagram for the same (07)

Q5 A Bring out the major recommendations of Dr L. C. Gupta Committee to strengthen the regulatory framework of SEBI. (08)

Q5 B What are the different methods of calculating VaR? (07)

OR

Q5 Write Short Notes (Any 3) (15)

1 Mark to Market Margin

2 Imperfect Hedge

3 Cost of Carry Model

4 SPAN Margin

5 Types of Margin

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