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Your Roll No.....

Sr. No. of Question Paper : 6818

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Unique Paper Code : 6203460026

Name of the Paper : Financial and Commodity Derivatives

Name of the Course : **B.Voc (BANKING AND INSURANCE)**

Semester : VIII

Duration : 3 Hours

Maximum Marks : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt all **six** questions.
3. All questions carry equal marks (**18** marks each).
4. Answers may be written either in English or Hindi; but the same medium should be used throughout the paper.

Q.1

- a) What is a "Derivative"? Identify the four main types of financial derivatives—Forwards, Futures, Options, and Swaps—and give a brief explanation of each.
- b) Who are the main participants in the derivatives market? Briefly explain the primary motive of a "Hedger" compared with that of a "Speculator."

Or

- a) Differentiate between the "Underlying Asset" and the "Derivative Contract." Give three examples of underlying assets commonly traded in the Indian derivative markets.
- b) State five key differences between an Over-The-Counter (OTC) contract and an Exchange-Traded contract.

Q.2

- a) What is the meaning of "Margin Money" in futures trading? Define the terms "Initial Margin" and "Maintenance Margin."
- b) Mr. A takes a long position in 1 Nifty futures contract (Lot size = 50) at a price of Rs.20,000. Mr. B takes a short position in the same contract at the same price. On the expiry day, Nifty closes at Rs. 20,200. Calculate the total profit or loss for both Mr. A and Mr. B.

Or

Q.3

- a) The NIFTY Index is currently at 1195. The historical dividend yield on the index is 3% p.a., and the borrowing rate is 9.5% p.a. Conceptually, explain the formula you would use to calculate the fair value of a 3-month future contract

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- b) Distinguish between Forwards and Options. Furthermore, explain the difference between a European Option and an American Option.

Or

- a) A stock is trading at Rs. 50. A call option with an exercise (strike) price of Rs. 48 is trading at a premium of Rs. 3. Calculate the intrinsic value and the time value of this option.
- b) Discuss in detail the important terms associated with option contracts: Moneyness (In-the-money, At-the-money, Out-of-the-money) and Strike Price. Give a brief example of an "Exotic Option."

Q. 4

- a) Equity shares of TCS Ltd. are currently available at ₹22 per share. An investor buys a Call option with a strike price of ₹20 for a premium of ₹5. Calculate the investor's net profit or loss if the stock price on the expiration date is (i) ₹15, and (ii) ₹28.
- b) Define the term SWAP. Detail the mechanisms and features of an Interest Rate SWAP and a Currency SWAP.

Or

- a) Cash Rich Ltd has invested Rs 50 crore in market-linked floating rate securities. To protect against falling interest rates, they enter into a swap to receive a fixed rate of 7.30% and pay a floating MIBOR rate. Illustrate how this swap transforms their floating-rate asset into a fixed-rate asset.
- b) What is a Credit Default Swap (CDS)? Explain how it operates like an insurance contract against default risk. Additionally, define a "Puttable Swap."

Q. 5

- a) The current spot price is high, and they fear it will rise further. Explain how they can use a "long hedge" in the commodity futures market to lock in their purchase price today.
- b) Explain the concepts of Straddle and Strangle option trading strategies. Under what market conditions would a speculator use a long straddle?

Or

- a) An Indian importer needs Rs 2,00,000 to pay for imports after 90 days. The current spot rate is INR 81.50, and the 3-month forward rate is INR 82.22. Explain why the importer should use a forward hedge and calculate the locked-in rupee cost of the import.
- b) Discuss the various risks involved in trading derivatives (e.g., Market Risk, Counterparty Risk, Liquidity Risk, Operational Risk)