**Derivatives and its Application**

**Q1. It is now October 2020. A company anticipates purchasing 1 million pounds of copper in each of February 2021, August 2021, February 2022, and August 2022. The company has decided to use the futures contracts traded by the CME Group to hedge its risk. One contract is for the delivery of 25,000 pounds of copper. The initial margin is $2,000 per contract, and the maintenance margin is $1,500 per contract. The company’s policy is to hedge 80% of its exposure. Contracts with maturities up to 13 months into the future are considered to have sufficient liquidity to meet the company’s needs. Devise a hedging strategy for the company with the given data of price (in cents per pound) movement as:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Oct 2020** | **Feb 2021** | **Aug 2021** | **Feb 2022** | **Aug 2022** |
| **Spot Price** | **372.00** | **369.00** | **365.00** | **377.00** | **388.00** |
| **Mar 2021 Futures Price** | **372.30** | **369.10** |  |  |  |
| **Sep 2021Futures Price** | **372.80** | **370.20** | **364.80** |  |  |
| **Mar 2022 Futures Price** |  | **370.70** | **364.30** | **376.70** |  |
| **Sep 2022 Futures Price** |  |  | **364.20** | **376.50** | **388.20** |

**What is the impact of the strategy you propose on the price the company pays for copper? What is the initial margin requirement in October 2020? (10 Marks)**

**Ans:**

**Introduction**

In this instance, the business intends to purchase copper in 4 various months, and it wants to hedge 80% of its exposure. There are several methods of hedging, consisting of derivatives such as choices and futures agreements. The price of circumventing hinge on the rate of acquired contract and the amount of risk being hedged. If a firm is hedging versus a significant direct exposure, it might need It is only half solved

Buy Complete from our online store

<https://nmimsassignment.com/online-buy-2/>

NMIMS Fully solved assignment available for**session JUNE 2023,**

your**last date is 29th May 2023**.

Lowest price guarantee with quality.

Charges**INR 350 only per assignment.**For more information you can get via mail or Whats app also

Mail id is aapkieducation@gmail.com

Our website [www.aapkieducation.com](http://www.aapkieducation.com/)

After mail, we will reply you instant or maximum

1 hour.

Otherwise you can also contact on our

whatsapp no 8791490301.

Contact no is +91 87-55555-879

**Q2. When a known future cash outflow in a foreign currency is hedged by a company using a forward (future) contract, there is no foreign exchange risk. When it is hedged using futures contracts, the daily settlement process does leave the company exposed to some risk. Explain the nature of this risk. In particular, consider whether the company is better off using a futures contract or a forward contract when –**

** The value of the foreign currency falls rapidly during the life of the contract**

** The value of the foreign currency rises rapidly during the life of the contract**

** The value of the foreign currency first rises and then falls back to its initial value**

** The value of the foreign currency first falls and then rises back to its initial value**

**(10 Marks)**

**Ans:**

**Introduction**

Foreign exchange danger emerges when a firm needs to make a payment or receive a payment in an international currency on a future day, and the interchange degreeamid the domestic & foreign money rises and falls in the interim. A business can use monetary tools such as onward agreements and futures contracts to minimize this risk. Nonetheless, the nature of the risk related to these instruments varies, and companies need to understand the ramifications of their selection of the device. When a firm uses an advancing agreement to hedge a recognized forthcoming money influx in

**Q3. The current stock price is $200, and 1-year forward contract on the stock. We assume that the risk-free rate of interest (continuously compounded) is 10% per annum for all maturities. Find the cost of forward.**

**a) The stock pays no dividend till maturity**. **(5 marks)**

**Ans:**

**Introduction**

In finance, an onward agreement is an arrangement amid the two celebrations to purchase or vend a fundamental property at a prearranged value & day in honesty. The cost of a forward contract depends on numerous aspects, including the present share value, the stage till the agreement's expiry, & the risk-free return price. It is essential to remember that forward contract costs depend upon several assumptions, consisting of the lack of returns, and market conditions might change,