Question no. 1

Discuss with suitable examples the basic concept of Hedging, Speculation and Arbitrage. What are the similarities and difference between them?

Hedging: Hedging is a financial strategy that should be understood and used by investors because of the advantages it offers. As an investment, it protects an individual’s finances from being exposed to a risky situation that may lead to loss of value. However, hedging doesn’t necessarily mean that the investments won’t lose value at all. Rather, in the event that happens, the losses will be mitigated by gains in another investment. Hedging is choosing to be protected from any unfavorable event that could affect one's finances while acknowledging the risks associated with each investment. Obtaining automobile insurance is a clear illustration of this. The insurance policy will cover at least some of the costs of repairs if there is a car accident.

Speculation: In economics, speculation is both a concept and an actual investment or trading practice that involves buying or selling an asset on the assumption that it will increase in value in the future. It basically involves investing in the hope of profiting from market fluctuations and inefficiencies. Note that a speculator would purchase an asset based on the assumption that its price would rise in the future to further explain the meaning of speculation. Hence. He or she will resell this asset to make a profit when the price of it rises or when demand rises, which raises the price. Essentially, speculators think in the future, and speculation is betting on future prices.

Arbitrage: The term "arbitrage" refers to the practice of simultaneously purchasing a security in one market and selling it in another market at a higher price. This allows investors to profit from the brief difference in the cost per share. By purchasing a stock on a foreign exchange where the equity's share price has not yet adjusted for the exchange rate, which is in a constant state of flux, traders take advantage of arbitrage opportunities in the stock market. Because of this, the stock's foreign exchange price is less expensive than its local exchange price, allowing the trader to profit from this difference. Arbitrage trades are considered low-risk despite the fact that they may appear to the untrained eye to be a complicated transaction.

Question no.2

What do you understand by the term Spot and Forward market.? Discuss with examples their effectiveness in international trade.

Spot market: Financial instruments like commodities, currencies, and securities are traded on the spot market for immediate delivery. The exchange of cash for the financial instrument is known as delivery. On the other hand, the delivery of the underlying asset at a later date is the basis for a futures contract. Spot and/or futures trading may be offered by exchanges and over-the-counter (OTC) markets. Because trades are exchanged for the asset immediately, spot markets are also known as "cash markets" or "physical markets." Both parties agree to the trade "right now," despite the fact that the official transfer of funds between the buyer and seller may take some time, such as in the stock market and in most currency transactions. In a non-spot, or futures, transaction, a price is agreed upon now, but funds will be transferred and delivered later.

Forward Market: Because trades are exchanged for the asset immediately, spot markets are also known as "cash markets" or "physical markets." Both parties agree to the trade "right now," despite the fact that the official transfer of funds between the buyer and seller may take some time, such as in the stock market and in most currency transactions. In a non-spot, or futures, transaction, a price is agreed upon now, but funds will be transferred and delivered later. Forward contracts are made possible by a forward market. There are some significant distinctions between forward contracts and futures contracts, despite the fact that they can be utilized for both hedging and speculation. Futures contracts have standardized characteristics in terms of contract size and maturity, whereas forward contracts can be customized to meet the needs of a customer. Banks or customers of a bank can carry out forwards; Futures are traded on a party-to-the-transaction exchange. Forwards are attractive in the foreign exchange market because of their flexibility.

In a spot market, delivery and cash payment typically occur immediately. In most organized markets, however, settlement, which entails the actual delivery of the instrument or commodity and the transfer of funds, typically takes two business days. Regardless of the settlement date, the buyer and seller immediately execute the contract at the current price and quantity. On the other hand, parties in the forward and futures markets agree to trade at a price for the underlying asset that is either a forward or future price, and delivery is also anticipated in the future. Consequently, forward/futures markets, in contrast to spot markets, create a contract today with a future settlement date. Spot markets can exist wherever there is a trading infrastructure.

Question no. 3

Discuss the uses and functions of derivatives.

Uses of derivatives in a brief manner:

Tools for avoiding risks: Utilizing a variety of strategies, such as hedging, arbitrage, spreading, etc., the effective control, avoidance, shifting, and management of various types of risks is one of the most significant services provided by derivatives.

Derivatives make it possible to shift or alter the portfolio risk characteristics of holders in a suitable manner.

These are especially useful in times of erratic trading patterns, wildly fluctuating interest rates, erratic exchange rates, and monetary turmoil.

Expectation of future costs: Utilizing derivatives as indicators of future price movements results in fresh price discoveries in both the spot market and the futures market.

They also play a role in educating the general public about the trading of a wide range of securities and commodities in the futures markets, which makes it possible to set prices at market equilibrium that are appropriate, accurate, and honest.

Consequently, they support society's resource distribution in an efficient and effective manner.

Increase liquidity: Since the majority of derivatives trading is based on margin trading, we can see that the full amount of the transaction is not required immediately.

Thus, these business sectors have a colossal number of dealers, examiners, and arbitrageurs working there. As a result, trading derivatives increases market liquidity and reduces underlying asset transaction costs.

Help investors: Derivatives make it possible for investors, fund managers, and traders to develop strategies that boost yields, enable optimal asset allocation, and support other investment goals.

The structure of prices is incorporated: Trading in derivatives has shown that the market has eliminated 13 price variations, narrowed the spread between prices, integrated the pricing structure at various points, and eliminated market gluts and shortages.

Facilitate the expansion of financial markets: Exchanging subordinates supports forceful exchanging on the business sectors and an assortment of chance taking procedures among market members, including examiners, hedgers, dealers, arbitrageurs, and so on., which results in an increase in national trading volume.

They also attract professionals, young investors, and other experts who will be the driving force behind the expansion of financial markets.

Brings market perfection: The market moves toward "complete markets" as a result of derivatives trading.

A situation is referred to as a "complete market idea" when none of the investors stand to gain more than the others, the return patterns of all existing securities cover all potential new securities, or there is no room for new securities to be introduced.

Functions of derivatives in a brief manner:

Disclosure of cost: In an organized derivatives market, values drive the prices of underlying assets to the level of the anticipated future and reflect the expectations of market participants.

Transfer of danger: The derivatives market helps shift risk from those who currently bear them but might not like them to those who want to take them.

Dependent on cash markets: Derivatives are connected to the underlying cash markets because of their nature. The underlying market experiences higher trading volumes when derivatives are introduced because more participants who would not have participated without a risk-transfer agreement participate.

Keep an eye on theory: Traders who engage in speculative activity shift their focus to the derivatives market, which offers greater control.

Boosts entrepreneurial spirit: A significant unintentional benefit is that derivatives trading stimulates new entrepreneurial activity.

Increases investments and savings: Derivatives markets contribute to the expansion of savings and investments over the long term. Due to the transfer of risk, market participants may increase their level of participation.

Question no.4

What do you mean by forward exchange market? How is forward rate determined ?

The swapping scale that has been settled on ahead of time for an exchange on the unfamiliar trade market that will occur at a particular future date is known as the forward conversion standard. The forward exchange market is a market for contracts that guarantee the delivery of foreign currency at a particular exchange rate in the future.

A parity relationship between the spot exchange rate and variations in interest rates between two nations determines the forward exchange rate, which indicates an economic equilibrium in the foreign exchange market without arbitrage opportunities. You can calculate the forward rate by dividing the spot rate by the ratio of interest rates and taking into account the time until expiration. The forward rate is the result of multiplying the spot rate by (1 + domestic interest rate)/(1 + foreign interest rate).

Exchange rates are influenced by a variety of factors, including inflation, interest rates, the balance of payments, public debt, terms of trade, political stability and performance, a recession, and speculation. The development of exchange rates is influenced by each of these elements. If a person sends or receives money frequently, staying informed about these topics will help them decide when to send money abroad at the best time. To ensure that the currency will be exchanged at the same rate regardless of any factors that could cause a negative movement, choose a provider with a locked-in exchange rate. By doing this, you can keep currency exchange rates from falling.

The purchasing power parity hypothesis provides an explanation for how forward rates are determined. The purchasing power of the two nations should be the same because the goods are the same, according to the buying power parity principle. This suggests that the price to exchange rate ratio ought to be one, rather than the exchange rate being the same as one.

Question no. 5

Distinguish between the following with suitable examples:

1. a call option and a put option

The person who buys a call can choose to buy a certain amount of the underlying asset at a certain price on or before a certain date in the future, but they are not required to do so.

When buying a put, on the other hand, the buyer has the option—but not the obligation—to sell a predetermined amount of the underlying asset at a predetermined price by a predetermined date.

The person purchasing a call option has the option, but they are not required, to purchase a predetermined quantity at a predetermined strike price on a predetermined future date. On the other hand, put options grant the buyer the authority to sell the underlying security at a predetermined price in the future. However, they are not required to follow suit.

A call option is a right to buy, whereas a put option is a right to sell. Therefore, the call action only generates profits when the underlying asset's value rises. On the other hand, the buyer will only benefit from the put option if the underlying value decreases.

Because there is no mathematical upper limit on any underlying rising price, the potential gain from a call option is infinite. The price is theoretically unlimited. However, because a stock's price technically cannot reach zero, a put option's potential gain will be mathematically limited.

Call options may or may not work out well. For instance, if the current price exceeds the strike price, a call option is said to be in the money, or ITM. If the spot price is lower than the strike price, the option is called out of the money, or OTM. Put options will either be in the money or out of the money. For instance, if the spot price is lower than the strike price, a put option is said to be in the money, or ITM. If the spot price is higher than the strike price, the put option is called out of the money, or OTM.

1. futures and forward contracts

A forward agreement is an extraordinary understanding between two gatherings that calls for settlement to happen at the present foreordained cost on a specific date from here on out. For instance, a Japanese automaker purchases auto parts from an Indian manufacturer with a 60-day payment of one million yen. The Indian importer has run out of yen, so let's assume that the current price of yen is Rs. 68. The yen may rise to Rs. 70 over the next sixty days. by accepting a bank's 60-day forward contract for Rs. 70, the importer can cover this exchange risk with insurance. The forward contract stipulates that the importer will pay the bank 70 million rupees and receive one million yen from the bank within 60 days.

An agreement between two parties to purchase or sell an asset at a specific price and time in the future is known as a futures contract. Futures contracts are distinct subtypes of forward contracts because they are standardized exchange-traded contracts. A speculator anticipates that gold will cost more than the Rs. that is currently being priced for the future. 9000 per 10 gm. He spends Rs. 1,000 on one lot of future gold. 9,00,000. 1 kilogram is the market lot size. The transaction's value will also rise to Rs. 9900 for each 10 gm, for a total value of Rs. 9,90,000. This is based on the assumption that the gold price will rise by 10% and that the margin money requirement will be 10%. In other words, the trader receives Rs 90,000.

There is a lot of confusion between forward contracts and futures contracts. The misconception stems primarily from the fact that when it comes to allocating risk in the face of future price uncertainty, both essentially perform the same economic functions. However, futures are a significant improvement over forward contracts because they provide more liquidity and eliminate counterparty risk.