DERIVATIVES - AN OVERVIEW

TI & RM Chapter 7

Q:1 Which of these is not a function of derivative products?

- a) Derivatives manage and mitigate risks associated with price fluctuations, in the is underlying asset.
- b) Derivatives help in transferring risks from risk adverse people to risk oriented people.
- c) Derivatives are typically used as a means of raising capital for companies
- d) Derivatives improve the liquidity of the underlying instrument.

Q:2 What is a forward contract?

- a) A contract traded on an exchange for immediate settlement
- b) A customized agreement to buy/sell an asset at a future date at a fixed price
- c) A standardized contract to hedge interest rate risks
- d) A money market instrument for short-term financing

Q:3 Which of the following is NOT a characteristic of a forward contract?

- a) Over-the-counter (OTC) instruments
- b) Customized terms between two parties
- c) Traded on an organized exchange
- d) High counterparty risk

Q:4 Which of the following assets can be the underlying in a forward contract?

- a) Commodities
- b) Currencies
- c) Financial Instruments
- d) All of the above

- Q:5 In a forward contract for Rice, if the forward price is set at Rs 5000 per bushel, what does this price represent?
- a) The price at which the Rice is currently trading in the market.
- b) The price at which the Rice will be bought and sold on the future date.
- c) The price at which the Rice will be delivered immediately.
- d) all of the above

- Q:6 Which of the following is NOT true about a Forward Rate Agreement?
- a) The principal is notional
- b) Used to hedge interest rate risks
- c) Exchange of cash flows occurs daily
- d) Fixed and floating legs are involved

Q:7 Which of the following is a feature of a futures contract?

- I. The maturity and size of contracts are standardized
- II. Futures contracts are traded on organized exchanges
- III. Futures contracts are highly liquid and can be closed out easily.
- IV. Counterparty risk is low because the exchange acts as an intermediary.
- a) I, IV
- b) II, III, IV
- c) I, II, III
- d) I, II, III, IV
- Q:8 What is the key difference between forward and futures contracts?
- a) Forwards are for short term; futures for long term
- b) Futures are customizable; forwards are standardized
- c) Forwards are OTC; futures are exchange traded
- d) Futures are illiquid; forwards are highly liquid

Q:9 _____ are standardized contracts that allow you to buy or sell a specific amount of one currency for

another at a predetermined exchange rate on a set future date.

- a) Currency Futures
- b) Currency Forwards
- c) Currency Options
- d) Currency Swaps

Q:10Which of the following is not true about Bond Futures?

- a) They are traded over-the-counter (OTC) between two parties
- b) They are standardized and traded on exchanges
- c) Bond futures are primarily available in 5-year and 10-year maturities
- d) Prices of bond futures depend on expected interest rate movements

Q:11Which of the following is a key factor influencing the price of a commodity futures contract?

- a) The spot price of the underlying asset
- b) The costs associated with financing, storing, insuring, and transporting the asset
- c) Any income earned from the asset.
- d) All of the above

Q:12Which of the following statements is TRUE about the formula for commodity futures pricing?

- a) Futures Price = Spot Price + Income Costs
- b) Futures Price = Spot Price + Costs Income
- c) Futures Price = Strike Price + Premium
- d) Futures Price = Spot Price × Interest Rate

Q:13In the pricing of financial futures, which cost is typically considered most significant?

- a) Storage cost
- b) Insurance cost
- c) financing cost
- d) Transportation cost

Q:14Swap is a derivative contract through which two parties exchange the cash flows or liabilities. Which of these is a type of Swap contract?

I. Interest rate swap

- II. Currency Swap
- III. Management Swap
- a) I, II
- b) II, III,
- c) I, III
- d) I, II, III,

Q:15Which of this statement is correct regarding Interest rate swap?

- I. It is a financial contract between two parties that involves the exchange of interest payments.
- II. One party typically pays a fixed interest rate, while the other pays a floating rate tied to a reference benchmark.
- III. In interest rate swaps, the principal amount is also exchanged between the parties.
- IV. Interest rate swaps are widely employed for managing and mitigating exposure to interest rate fluctuations.
- a) I, II, IV
- b) II, III, IV
- c) I, II, III
- d) I, II, III, IV

Q:16What is a Plain Vanilla Swap in interest rate swaps?

- a) A swap where two parties exchange only floating rates
- b) A swap where a fixed rate is exchanged for a floating rate or vice versa
- c) A swap where the notional principal reduces over time
- d) A swap where the maturity can be extended by one party

Q:17Which type of interest rate swap involves the notional principal amount reducing over time, similar to a loan repayment?

- a) Step-up Swap
- b) Amortising Swap
- c) Extendable Swap
- d) Plain Vanilla Swap

Q:18Which swap allows one counterparty the right to extend the maturity beyond the original contract period?

- a) Step-up Swap
- b) Delayed Start Swap
- c) Extendable Swap
- d) Plain Vanilla Swap

RBI GUIDELINES ON IRS

- Scheduled commercial banks (excluding Regional Rural Banks), Primary Dealers and all India Financial Institutions are allowed to use Interest Rate Swaps (IRS) to help manage their own financial positions.
- They may also offer these products to corporates for hedging their own balance sheet exposures.
- Participants should ensure adequate infrastructure and risk management systems before venturing into market making activities.
- Benchmark rate should naturally arise from the supply and demand dynamics of the market, rather than being set artificially by a central authority or regulator and require market acceptance.
- The parties involved in a IRS are free to choose any domestic money or debt market rate as the benchmark rate. However the rate is objective, transparent and mutually acceptable.
- There is no restriction on the minimum or maximum size of notional principal amounts. Size norms are to emerge in the market with the development of the market

- There is no restriction on the tenor as well. Banks, Financial Institutions and Primary Dealers are required to maintain capital for FRAs and IRS.
- Transactions for hedging and market making purposes should be recorded separately.
- Participants are required to <u>report their operations in FRAs</u> and IRS on a fortnightly basis to Monetary Policy

Department of RBI.

- Q:19Currency swap is a financial agreement between two parties to exchange a principal amount and interest payments in different currencies. Which of this statement is correct regarding currency swap?
- a) Currency swaps involve exchanging principal amounts in different currencies without converting them.
- b) Periodic interest payments are made in their respective currencies based on agreed-upon interest rates.
- c) Currency swaps are a risk management tool used to hedge against exchange rate fluctuations.
- d) all of the above

Q:20Which of the following best describes a Basis Swap?

- a) A swap where two parties exchange fixed interest payments over time
- b) A swap where one party pays a fixed rate and the other pays a floating rate based on the same index
- c) A financial swap where two parties exchange floating interest payments based on different benchmark rates like LIBOR or EURIBOR
- d) A currency swap involving exchange of principal and interest in different currencies

- Q:21The option contract is an important type of derivative product. Which of this statement not defines Option contract?
- a) Options contracts grant the buyer right to buy or sell an underlying asset on a predetermined price.

- b) Options contracts obligate the buyer to buy or sell the underlying asset.
- c) The right to buy or sell an underlying asset must be exercise by buyer within a predetermined period.
- d) They serve purposes such as hedging against risk, speculating on price movements, or generating income.

Q:22Imagine you are interested in purchasing shares of Company XYZ, which are currently trading at 50 per share. You believe the stock price will rise in the near future, so you buy option contract expiring in three months, for a premium of 2 per share. This option gives you the right, but not the obligation, to buy 100 shares of XYZ before the option expires. This represents which option contract?

- a) Call Option
- b) Put Option
- c) Forward Contract

d) Swap Contract

Q:23 _____option gives the holder the right, but not the obligation, to sell the underlying asset at a predetermined within a specified period of time.

- a) Call Option
- b) Put Option
- c) Forward Contract
- d) Swap Contract

- Q:24 _____are individuals or entities who use derivatives to manage or hedge risks associated with their assets, liabilities, or positions. They aim to protect themselves against adverse price movements by taking offsetting positions in derivatives.
- a) Hedgers
- b) Speculators
- c) Traders
- d) All of the above

Q:25Speculators in the derivatives market aim to____

- a) Earn a stable income.
- b) Profit from price volatility.
- c) Reduce their investment risk.
- d) Facilitate trading for other market participants.

Which of the following statements about a call option is/are correct?

- a) An call option is 'at-the-money' when the option's strike price is equal to the underlying asset price.
- b) A call option is 'in-the-money' when the strike price is less than the underlying asset price.
- c) A call option is 'out-of-the-money' when the strike price is greater than the underlying asset price.
- d) All of the above

Q:26A put option is "out-of-the-money" when___

- a) The strike price is higher than the underlying asset price.
- b) The strike price is lower than the underlying asset price.
- c) The strike price is equal to the underlying asset price.
- d) The option is exercised.

Q:27When is an option considered "at-the-money"?

a) When the strike price is significantly higher than the underlying asset price.

- b) When the strike price is significantly lower than the underlying asset price.
- c) When the strike price is equal to the underlying asset price.
- d) When the option is about to expire.

- Q:28If the current stock price of XYZ Corp. is \$50 and a call option on XYZ Corp. has a strike price of \$45, the option is_____
- a) In-the-money
- b) Out-of-the-money
- c) At-the-money
- d) Expired

Q:29Which of the following statements is TRUE regarding a put option with a strike price of \$80 and an underlying asset price of \$75?

- a) It is in-the-money.
- b) It is out-of-the-money.
- c) It is at-the-money.

d) It has no intrinsic value.