

**Sen Finance FIN201 Practice Questions - II**  
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**Information for questions 13 and 14: Today is January 1, 20X1. A Treasury bond with 6 years to maturity and six-monthly coupons of \$20 (payable on January 1 and July 1) has a yield of 3.7%. The six-month spot rate is 3.2%, the 12 month spot rate is 3.4%, and the 18 month spot rate is 3.57%.**

**Question 13: What is  $F(0,18 \text{ mo})$  for delivery of an ex-coupon 4.5 year maturity bond with semi-annual coupons of \$20 (payable on January 1 and July 1) on July 1, 20X2?**

- A) \$1010.25**
- B) \$1073.45**
- C) \$1016.01**
- D) \$1012.18**

**Question 14: Suppose you have entered into the long side of the forward contract in the above question. On July 1, 20X1 the yield on the bond rises to 3.9%, the six-month spot rate is 3.4%, and the 12 month spot rate is 3.6%. Calculate the value on July 1 of the forward contract that you had entered into six months earlier.**

- A) -8.89**
- B) -9.22**
- C) -9.55**
- D) 0**

**Question 15: I) Euribor is the reference rate for euro-denominated forward rate agreements, short term interest rate futures contracts and interest rate swaps.  
II) Libor is the daily rate based on the interest rates at which banks offer to lend unsecured funds to other banks in the London money market.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 16: I) In a Forward Rate Agreement the buyer (Long) pays floating rate on the notional amount to the Seller (Short), and Seller pays fixed rate to Buyer.  
II) A 2x6 (2 by 6) FRA settles in 60 days (2\*30), and underlying rate is 180 days (6\*30) LIBOR.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 17: The notional amount for a 6x9 FRA is \$5 M. The fixed rate is 4%. On settlement date (180 days from when contract was entered into) the 90 day Libor rate is 5.5%. What are the cash flows for the long is closest to?**

- A) 18,750**
- B) 27,5000**
- C) 18,500**
- D) 200,000**

**Question 18:** A US firm has a subsidiary in Germany from which Euro 50 M receivables are due in 6 months. It enters into a currency forward contract with settlement in 6 months to fully hedge these receivables at Euro 0.60 for \$1. On settlement date the spot rate is Euro 0.66 per \$1. The cash flow to the firm on settlement date from receivables and currency forward combined is:

- A) 3250000
- B) 8333333
- C) 3000000
- D) 7692308

**Question 19:** I) Futures are standardized and traded in Futures Exchanges and their price is determined by the market.

II) Futures have no counter party credit risk as the exchange guarantees performance.

I&II are: A) TT B) TF C) FT D) FF

**Question 20:** I) The practice of “marking to market” runs the risk of losses accumulating on a position..

II) If during the day a position makes money, then the margin account is credited, and if the position loses money then a margin call is made.

I&II are: A) TT B) TF C) FT D) FF

**Question 21:** I) Futures Market (clearinghouse) sets the Settlement Price equal to the price for the last trade during the day.

II) The Settlement Price is used to determine how much money a Futures position has gained or lost during the day.

I&II are: A) TT B) TF C) FT D) FF

**Information for questions 22 to 26:** A trader enters into the long side of 500 Futures contracts each of which requires a margin of \$6. The initial Futures price is \$50. The maintenance margin is \$4.

**Question 22:** What is the initial dollar margin?

- A) 0 (as futures have zero initial price)
- B) 300
- C) 3000
- D) 25000

**Question 23:** At the end of the first day the settlement price changes to \$50.63. What is the margin call?

- A) 0
- B) 0.63
- C) 315
- D) -315

**Question 24:** What is the dollar margin at the beginning of the second day?

- A) 2685
- B) 3000
- C) 3315
- D) 25315

**Question 25: At the end of the second day the settlement price falls to \$44.95. What is the margin call?**

- A) 0
- B) 525
- C) 2525
- D) 2840

**Question 26: What is the dollar margin at the beginning of the third day?**

- A) 0
- B) 2685
- C) 3000
- D) 25000

**Question 27: I) On Settlement Date the Futures Price converges to the Spot Price.  
II) The change in the Futures Price during a day has to exceed the Price Limits set by the exchange.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 28: I) For futures, if the price limit is \$4, the settlement price the previous day is \$95.85, then a move in futures prices to \$99.85 is a “limit move”.**

**II) For futures, if the price limit is \$4, the settlement price the previous day is \$95.85, then a move in futures prices to \$99.85 is a “limit up”.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 29: I) The shareholders of a Futures Exchange hold Seats.**

**II) Scalpers, day traders, and position traders are different kinds of brokers.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 30: I) Position Traders attempt to profit by selling at Ask and buying at Bid.**

**II) Scalpers keep longer positions, but close at the end of the trading day.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 31: I) Futures contracts are always be settled for cash, not by delivery of physicals.**

**II) The futures price for an financial asset (costless storage) will be lower than the expected value for the asset if the expected rate of return on the asset is higher than the riskless rate.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 32: A T-bill with 60 days to maturity and par value \$1,000 has a discount rate of 3.6%. What is its price?**

- A) 994.00
- B) 994.04
- C) 994.08
- D) 994.12

**Question 33: T-bill Futures price quoted at 96.40 means that:**

- A) price to be paid on delivery of 90 day T-bill of face value \$1,000,000 is 991000
- B) price to be paid on delivery of 90 day T-bill of face value \$1,000,000 is 964000
- C) price to be paid on delivery of 30 day T-bill of face value \$1,000,000 is 991000
- D) price to be paid on delivery of 30 day T-bill of face value \$1,000,000 is 964000

**Question 34: For every basis point change in the IMM index, the futures price changes by:**

- A) Euro 1
- B) \$ 1
- C) Euro 25
- D) \$ 25

**Question 35: I) A medium or long term futures contract has a Treasury note or a bond as the underlying.**

**II) A Medium or long term futures contract specifies a set of bonds that may be delivered to satisfy the contract.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 36: I) If the bond delivered to settle a medium or long term futures contract has a coupon greater than the designated benchmark bond, the price paid by the long is adjusted downwards.**

**II) Futures contracts specify a set of bonds that may be delivered to satisfy the contract and on settlement the short chooses which particular bond is to be delivered.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 37: If the quoted price for a 3 month S&P futures contract is 1400, then futures price is:**

- A) 0
- B) 1400
- C) 70000
- D) 350000

**Question 38: I) An call option is necessarily a better trade than a forward, as on settlement date the option can have only a positive value, whereas the forward can have a negative value (require payment).**

**II) A call option on a stock provides protection against fall in value of the stock.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 39: For an Interest Rate Call, if the fixed rate is 5%, the notional amount in \$10 M and the interest rate on maturity date is 6.25%, then the holder of the option will receive:**

- A) 0**
- B) 125000**
- C) 500000**
- D) 625000**

**Question 40: I) Interest Calls can be combined to set an “Interest Rate Cap” on a floating rate loan.**

**II) Borrowers can purchase interest rate puts to set an “Interest Rate Floor” on the rate on a floating rate debt**

**I&II are: A) TT B) TF C) FT D) FF**

**Information for questions 41 and 42: Suppose on March 31, 20X0, on the Chicago Mercantile Exchange we have a currency option gives the owner the right to purchase Euros for dollars on September 31, 20X0. (The expiration months for currency options are usually March, June, September and December.)**

**This currency option is EUR156, that is the option to buy Euro 1 for \$1.56. (Note: Except for the Japanese Yen, currency option exercise prices are state in dollars. Japanese Yen options are stated in hundredths of cents).**

**Suppose a trader purchases 10 contracts. The contract size on Chicago Mercantile Exchange is EUR 125,000 (which is double the size of Philadelphia currency option contracts).**

**Question 41: The option premium is quoted as 0.40. What is the dollar premium that the trader pays?**

- A) \$4**
- B) \$5,000**
- C) \$500,000**
- D) \$5,195,0000**

**Question 42: On maturity date if the exchange rate EURUSD is 1.65 (that is \$1.65 for 1 Euro), then the dollar payoff to the trader is:**

- A) 16.5**
- B) 11,250**
- C) 112,500**
- D) 2,062,500**

**Question 43: I) An increase in volatility of the underlying will cause a fall in the price of a call option due to increased risk.**

**II) Due to time value of money, an increase in time to maturity will cause the price of a call option to be lower.**

**I&II are: A) TT B) TF C) FT D) FF**

**Question 44: I) For speculators, trading in derivatives instead of the underlying offers:**

	<b>Returns</b>	<b>Risk</b>
<b>A)</b>	<b>Higher</b>	<b>Higher</b>
<b>B)</b>	<b>Higher</b>	<b>Lower</b>
<b>C)</b>	<b>Lower</b>	<b>Higher</b>
<b>D)</b>	<b>Lower</b>	<b>Lower</b>

- |              |               |
|--------------|---------------|
| <b>13) A</b> | <b>29) B</b>  |
| <b>14) A</b> | <b>30) D</b>  |
| <b>15) A</b> | <b>31) C</b>  |
| <b>16) D</b> | <b>32) A</b>  |
| <b>17) C</b> | <b>33) A</b>  |
| <b>18) B</b> | <b>34) D</b>  |
| <b>19) A</b> | <b>35) A</b>  |
| <b>20) C</b> | <b>36) D</b>  |
| <b>21) C</b> | <b>37) D</b>  |
| <b>22) C</b> | <b>38) D</b>  |
| <b>23) A</b> | <b>39) B</b>  |
| <b>24) C</b> | <b>40) B</b>  |
| <b>25) C</b> | <b>41) B</b>  |
| <b>26) C</b> | <b>42) C*</b> |
| <b>27) B</b> | <b>43) D</b>  |
| <b>28) A</b> | <b>44) A</b>  |

**Answer 41: Option premium is quoted in US cents per unit of underlying currency with the exception of the Japanese yen.**