8.08 Pricing and Valuation of Options

Question 1
An increase in the risk-free interest rate is *most likely* to cause the arbitrage-free value of European equity put option to:
A. decrease.
B. remain unchanged.
C. increase.

Question 2
Which of the following instruments is *least likely* to be classified as a contingent claim?
A. Total return swap
B. Credit-linked note
C. Contract for difference

Question 3
An in-the-money European call option on a stock has 3 months until expiration. An increase in the risk-free interest rate will *most likely* cause the option value to:
A. decrease.
B. remain the same.
C. increase.

Question 4
The *lowest* value of a European put option is the greater of zero or the:
A. strike price minus the spot price.
B. present value of the strike price minus the spot price.
C. spot price minus the present value of the strike price.

Question 5
Which of the following types of derivatives *most likely* gives the buyer a right but no obligation to trade the underlying?
A. Bond futures
B. Interest rate swaps
C. Credit default swaps

Question 6
A six-month European put option on a common stock is valued at €39, while an otherwise identical one-year put option is valued at €38. All else being equal, which of the following *best* describes the circumstance that results in this price difference?
A. The options are deep in the money.
B. The stock pays a dividend in nine months.
C. The underlying stock's volatility has increased.

Question 7
The exercise value of an in-the-money put option is *best* described as the strike price of the option minus the:
A. underlying asset price.
B. premium paid by the option buyer.
C. sum of the underlying asset price and the premium paid by the option buyer.

Question 8
An increase in which of the following is *most likely* to cause the value of both puts and calls to increase?
A. Volatility
B. Strike price
C. Interest rate

Question 9
An analyst observes the following market data for one American put option:

Selected Data	
(in CAD)	
Stock price	48
Strike price	50
Option premium	4

This option's moneyness is *best* described as:
A. in the money.
B. at the money.
C. out of the money.

Question 10
Compared to a European put option on common stock that expires in six months, an otherwise identical European put option that expires in one year would most likely be worth less today if it is:
A. at-the-money.
B. in-the-money.
C. out-of-the-money.

Question 11
The exercise value of an in-the-money call option is *best* described as the market price of the underlying asset minus the:
A. strike price.
B. premium paid by the option buyer.
C. strike price plus the premium paid by the option buyer.

Question 12
When the market price of the underlying asset is 49, a trader sells a call option with a strike price of 55 for a premium of 6. At the time of the initial sale, the option is *most likely*:
A. in the money.
B. at the money.
C. out of the money.

Question 13
A put option is *most likely* in the money when the underlying asset price is less than the:
A. strike price.
B. strike price less the premium.
C. present value of the strike price.

Question 14
All else being equal, the value of a European call on a dividend-paying stock *most likely* increases with an increase in the:
A. risk-free rate.
B. exercise price.
C. dividend payment.

Question 15
An analyst collects information on three American-style call options on the same stock:

(USD)

Option	Strike	Option Premium
A	30	10.5
B	35	6.0
C	40	1.1

The stock is currently trading at USD 40 and all options expire in one week. Which option has the greatest time value?
A. Option A
B. Option B
C. Option C

Question 16
Which of the following derivatives is *most likely* considered a forward commitment contract?
A. Credit default swap
B. European-style equity call option
C. Fixed-for-floating interest rate swap

Question 17
A cash dividend payment on the underlying stock of a European style option *most likely* results in:
A. both call and put values decreasing.
B. call values decreasing and put values increasing.
C. call values increasing and put values decreasing.

Question 18
Which of the following is *least likely* a characteristic of forward commitments?
A. Gain/loss payoffs are linear.
B. Contract has a value of zero at initiation.
C. Buyer obtains rights, and seller incurs obligations.

Question 19
All else equal, for a European call option on a dividend-paying stock, the call option's intrinsic value will *most likely* decrease if there is an increase in the:
A. risk-free interest rate.
B. underlying stock's price.
C. underlying stock's dividend.

Question 20
Prior to expiration, the minimum value of an option is the greater of zero or the underlying's stock price minus the present value of the strike price. The option is *most likely* a(n):
A. American put.
B. European put.
C. European call.

Question 21
Which of the following *best* describes how exercise prices affect option values? Exercise prices are:
A. inversely related to call and put values.
B. inversely related to call values and directly related to put values.
C. directly related to call values and inversely related to put values.

Question 22
Which of the following *most likely* benefits a trader who is short a put option?
A. A decrease in the price of the underlying asset
B. An increase in the price of the underlying asset
C. An increase in the volatility of the underlying asset

Question 23
An equity call option is *most likely* in the money when the stock price is greater than the:

A. strike price.
B. strike price plus the premium.
C. present value of the strike price.

Question 24

Given its effect on option values, the volatility of the underlying is *most likely*:
A. directly related to call and put values.
B. inversely related to call and put values.
C. directly related to call values and inversely related to put values.