Question #1 of 30

Question ID: 1254513

Regulators in most jurisdictions require banks to hold adequate capital against risks. Which key risk faced by a bank is usually required to hold capital reserves with the shortest time horizon?

A) Credit risk.

B) Market risk.

C) Operational risk.

D) Reputational risk.

Question #2 of 30

Question ID: 1254514

An insurance company faces moral hazard and adverse selection risks when determining which risks it should insure in order to maintain its profitability. Which of the following methods is used to mitigate against adverse selection?

A) Coinsurance provisions.

B) Deductibles.

C) Ongoing due diligence.

D) Policy limits.

Question #3 of 30

Question ID: 1254515

An investment advisor has an institutional client that is very risk-seeking and wishes to speculate on large price movements in foreign commodities. Which of the following types of hedge funds would be suitable for the client?

A) Dedicated short funds.

B) Emerging market funds.

C) Global macro funds.

D) Managed futures funds.

Question #4 of 30

Question ID: 1254516

An investor has USD 20,000 to invest and she is speculating that the price of Stock ABC will rise substantially in six months. The current price of the stock is USD 10. She is deciding between investing directly in the stock or purchasing six-month call options with a strike price of USD 15 for USD 1.60. How much profit/(loss) will the investor make after six months if she only purchases the options and the price of the stock is USD 12 in six months?

A) USD 0.

B) USD 4,000.

C) (USD 6,000).

D) (USD 20,000).

Question #5 of 30

Question ID: 1254518

A portfolio manager currently has a USD 15 million equity exposure with a beta of 1.25 relative to the S&P 500 and would like to hedge the position for the next three months. Currently, three-month S&P 500 futures contracts are trading at 1,098. A tailing the hedge adjustment is required so that, when evaluating the next daily settlement period, the futures price has moved to 1,102 and the S&P 500 spot price is 1,116. How many S&P 500 contracts should be sold after making a tailing the hedge adjustment (assume a multiplier of 250)?

A) 67 contracts.

B) 68 contracts.

C) 69 contracts.

D) 70 contracts.

Question #6 of 30

Question ID: 1254524

A summary of rates that an investor should expect to realize on bond investments for specific maturities is provided below:

Bond maturity in years	**Spot rate**

1	1.50%
2	2.00%
3	2.50%
4	3.25%
5	4.00%

The three-year forward rate starting in one year is closest to:

A) 1.75%.
B) 3.00%.
C) 3.84%.
D) 5.53%.

Question #7 of 30

Question ID: 1254526

You have a short Treasury bond interest rate futures position. The bonds pay coupons semiannually on June 30 and December 31 each year. Assuming the quoted futures price is 96-24/32, which of the following bonds is the cheapest-to-deliver bond?

Bond	Quoted Bond Price	Conversion Factor	Coupon Rate (%)
1	124	1.18	6%
2	106	1.02	4%
3	114	1.11	5%
4	102	1.01	3%

A) Bond 1.
B) Bond 2.
C) Bond 3.
D) Bond 4.

Question #8 of 30

Question ID: 1254527

There is a USD 5 million notional swap that pays a floating rate based on the six-month LIBOR and receives a 5% fixed rate semiannually. The swap has a remaining life of 15 months with pay dates at 3, 9, and 15 months. Spot

LIBOR rates are as follows: 3 months at 4.3%, 6 months at 4.6%, 9 months at 4.8%, 12 months at 4.9%, and 15 months at 5.1%. The LIBOR at the last payment date was 4.5%. What is the value of the swap to the fixed-rate receiver?

A) USD 167.
B) USD 2,586.
C) USD 1,444.
D) USD 22,394.

Question #9 of 30

Question ID: 1254522

An investor holds both American call and put options on Stock A that all expire in six months. The strike prices of all the options are identical and Stock A is currently trading at the strike price. The investor is considering early exercise of the put or the call options depending on which direction the price of Stock A moves in the coming months. Which type of American option should only be exercised on the expiration date?

A) Call option on dividend-paying stock.
B) Call option on non-dividend-paying stock.
C) Put option on dividend-paying stock.
D) Put option on non-dividend-paying stock.

Question #10 of 30

Question ID: 1254523

An options trader is interested in purchasing an American option. To reduce costs, he describes that he is willing to transact in the over-the-counter market and purchase an option whereby the early exercise may be restricted to certain discretely spaced dates. What type of option is the trader describing?

A) Bermudan option.
B) Chooser option.
C) Gap option.
D) Asian option.

Question #11 of 30

Question ID: 1254517

The primary role of central counterparties (CCPs) is to provide reduced risk of default or non-payment by its members to each other. For example, CCPs clear over-the-counter (OTC) derivatives transactions. However, in the process of performing their role, CCPs face several key and substantial risks. Which of the following risks is least likely to be faced by a CCP?

A) Legal risk.
B) Liquidity risk.
C) Model risk.
D) Settlement and payment risk.

Question #12 of 30

Question ID: 1254519

Interest rates in Australia and Canada are currently 2% and 3%, respectively. The spot rate is 1.05 AUD/CAD. Using interest rate parity, what is the one-year forward rate for CAD from the perspective of a Canadian investor?

A) 0.9432.
B) 0.9617.
C) 1.0398.
D) 1.0603.

Question #13 of 30

Question ID: 1254525

A homeowner has an existing 20-year, 4% fixed-rate mortgage (level payment and fully amortizing) with a current balance of USD 400,000. In view of falling mortgage interest rates, if the mortgage was refinanced today into a new 20-year, 3% fixed-rate mortgage, which of the following amounts is closest to the amount that the homeowner would save in biweekly mortgage payments?

A) USD 94.71.
B) USD 102.61.
C) USD 153.84.
D) USD 205.53.

Question #14 of 30

Question ID: 1254520

An 18-month futures contract on an equity index is currently priced at USD $3,793.85. The underlying stocks are currently valued at $3,625 and have a continuously compounded dividend yield of 2%. The continuously compounded risk-free rate is 5%. What is the potential arbitrage profit per contract and the appropriate strategy?

A) $1—buy the futures, sell the spot.

B) $2—buy the futures, sell the spot.

C) $1—sell the futures, buy the spot.

D) $2—sell the futures, buy the spot.

Question #15 of 30

Question ID: 1254521

What is the natural gas implied storage cost if the October 2009 spot price is 5.128, assuming the annual risk-free rate is 5.5% and the one-year forward price is 5.522?

A) $0.405.

B) $0.305.

C) $0.205.

D) $0.106.

Question #16 of 30

Question ID: 1254528

A risk manager has calculated the daily VaR at a 95% confidence level of an investment to be USD 50,000. Which of the following amounts is closest to monthly VaR at a 99% confidence level? Assume 250 days per year and 50 weeks per year.

A) USD 315,760.

B) USD 331,171.

C) USD 349,640.

D) USD 386,725.

Question #17 of 30

Question ID: 1254530

An analyst is computing the VaR of an investment in Capsule Music, Inc. The company's stock is trading at USD 32.50 and has a daily volatility of 2.0%. Using the delta-normal method, which of the following amounts is closest to daily VaR at the 99% confidence level of a long position in an at-the-money call on the stock (with a delta of 0.5)?

A) USD 0.53.
B) USD 0.76.
C) USD 0.84.
D) USD 1.51.

Question #18 of 30

Question ID: 1254529

A risk manager is on her first day at her job at an investment firm and is attempting to clearly define the firm's various measures of risk for its portfolios and sub-portfolios. Which property of a coherent risk measure states that a portfolio with greater future returns will likely have less risk?

A) Monotonicity.
B) Positive homogeneity.
C) Subadditivity.
D) Translation invariance.

Question #19 of 30

Question ID: 1254541

A quantitative analyst has been asked to examine the purchase of a 12-month European call option on Stock Z using a two-step binomial tree model. Stock Z does not pay dividends. The annual standard deviation is 12% and the continuously compounded annual risk-free rate is 3%. What is the risk-neutral probability of the stock price going down in a single step?

A) 40.3%.
B) 43.0%.
C) 57.0%.
D) 59.7%.

Question #20 of 30

Question ID: 1254542

An options analyst is pricing a one-year European put option on Stock Y using the Black-Scholes-Merton (BSM) model. Stock Y will be paying a dividend of USD 2.00 per share on an ex-dividend date two months from now and will not be paying any further dividends for two years. The analyst has gathered the following information:

Current stock price	USD 60
Risk-free rate	4% per year continuously compounded
Option exercise price	USD 65
N(d1)	0.7285
N(d2)	0.6984

What is the price of a one-year European put option on Stock Y?

A) USD 0.
B) USD 1.36.
C) USD 2.55.
D) USD 3.09.

Question #21 of 30

Question ID: 1254543

The current stock price of Company M is USD 30. A risk manager is monitoring call and put options on Company M with exercise prices of USD 60 and five days to maturity. Which of the following scenarios is most likely to occur if the stock price rises by USD 1?

	Call value	Put value
A)	Increase by 0.10	Decrease by 0.10
B)	Increase by 0.90	Decrease by 0.10
C)	Increase by 0.10	Decrease by 0.90
D)	Increase by 0.90	Decrease by 0.90

Question #22 of 30

Question ID: 1254538

A U.S. government bond with a 5% coupon and USD 1,000 par value pays its coupons semiannually on June 15 and December 15. It is priced to provide for a 4% yield to maturity. The bond is purchased and it settles on August 21, 2019; the bond matures on June 15, 2021. What is the clean price of the bond?

A) USD 1,012.04.

B) USD 1,017.31.

C) USD 1,019.04.

D) USD 1,026.46.

Question #23 of 30

Question ID: 1254539

An investor is looking to invest in short-, intermediate-, or long-term bonds and is analyzing various scenarios involving changes in the yield curve shape. Assuming an upward-sloping yield curve and the expectation of an increase in general interest rates, in which situation would it be relatively least attractive to be invested solely in intermediate-term bonds?

A) A negative butterfly.

B) A positive butterfly.

C) A flattening of the yield curve.

D) A steepening of the yield curve.

Question #24 of 30

Question ID: 1254540

A fixed income manager wants to perform sensitivity analysis regarding the impact of various interest rate changes on the price of an option-free bond currently trading at par. The bond has a duration of 8.25 and a convexity of 212.5. Using the duration/convexity approximation, the percentage price change of a 75-basis-point increase in interest rates is closest to:

A) –4.99%.

B) –5.59%.

C) –6.19%.

D) –6.79%.

Question #25 of 30

Question ID: 1254534

An analyst has gathered the following data on interest rates and Moody's ratings:

Country	Interest rate on dollar-denominated 10-	Interest rate on 10-year U.S.	Moody's sovereign

	year sovereign bond	Treasury bond	bond rating
A	5.8%	2.5%	B1
B	5.1%	2.5%	B3
C	5.8%	2.5%	B3
D	5.1%	2.5%	B1

Which country is most likely to default on its foreign debt?

A) Country A.
B) Country B.
C) Country C.
D) Country D.

Question #26 of 30

Question ID: 1254535

An analyst has prepared the following one-year transition matrix.

Rating from	Rating to			
	A	B	C	Default
A	90%	5%	5%	0%
B	5%	85%	5%	5%
C	0%	5%	80%	15%

The probability that a C-rated firm will default over a two-year period is closest to:

A) 15%.
B) 27%.
C) 28%.
D) 30%.

Question #27 of 30

Question ID: 1254537

Within an institution, the board of directors and management share some common responsibilities but they also have distinct responsibilities within an institution. Which responsibility is generally shared by both the board and management?

A) Conduct stress tests.

B) Regularly update stress-testing activities.

C) Actively challenge the results of stress tests.

D) Report on the governance, validation, and independent review of stress tests.

Questions #28-29 of 30

Questions 17 and 18 refer to the following information.

The parameters of a generalized autoregressive conditional heteroskedastic (GARCH)(1,1) model are $\alpha = 0.03$, $\beta = 0.82$, and $\omega = 0.000009$. Assume daily volatility is estimated at 0.8% and today's stock market return is 5%.

Question #28 of 30

Question ID: 1254532

What is the new estimate of volatility using the GARCH(1,1) model?

A) 0.0136%.

B) 0.2061%.

C) 1.168%.

D) 4.540%.

Question #29 of 30

Question ID: 1254533

What is the implied long-run volatility level?

A) 0.004%.

B) 0.006%.

C) 0.655%.

D) 0.775%.

Question #30 of 30

Question ID: 1254536

A company has borrowed USD 9.4 million. You estimate that the company has a probability of default (PD) of 1.7% and a recovery rate of 70%. What is the expected loss?

A) $35,700.

B) $42,850.

C) $47,940.

D) $52,150.