Financial Risk Manager

1. ThetaBank has extended substantial financing to two mortgage companies, which these mortgage lenders use to finance their own lending. Individually, each of the mortgage companies have an exposure at default (EAD) of $20 million, with a loss given default (LGD) of 100%, and a probability of default of 10%. ThetaBank's risk department predicts the joint probability of default at 5%. If the default risk of these mortgage companies were modeled as independent risks, the actual probability would be underestimated by:

A. 1%

B. 2%

C. 3%

D. 4%

Answer(s): D

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2. For which one of the following four reasons do corporate customers use foreign exchange derivatives?
I) To lock in the current value of foreign-denominated receivables
II) To lock in the current value of foreign-denominated payables
III) To lock in the value of expected future foreign-denominated receivables
IV) To lock in the value of expected future foreign-denominated payables

A. II

B. I and IV

C. II and III

D. I, II, III, IV

Answer(s): D

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3. Gamma Bank provides a $100,000 loan to Big Bath retail stores at 5% interest rate (paid annually). The loan is collateralized with $55,000. The loan also has an annual expected default rate of 2%, and loss given default at 50%. In this case, what will the bank's exposure at default (EAD) be?

A. $25,000

B. $50,000

C. $75,000

D. $105,000

Answer(s): B

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4. When looking at the distribution of portfolio credit losses, the shape of the loss distribution is ___ , as the likelihood of total losses, the sum of expected and unexpected credit losses, is ___ than the likelihood of no credit losses.

A. Symmetric; less

B. Symmetric; greater

C. Asymmetric; less

D. Asymmetric; greater

Answer(s): D

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5. Which one of the following four statements correctly defines chooser options?

A. The owner of these options decides if the option is a call or put option only when a predetermined date is reached.

B. These options represent a variation of the plain vanilla option where the underlying asset is a basket of currencies.

C. These options pay an amount equal to the power of the value of the underlying asset above the strike price.

D. These options give the holder the right to exchange one asset for another.

Answer(s): A

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6. Which one of the following four metrics represents the difference between the expected loss and unexpected loss on a credit portfolio?

A. Credit VaR

B. Probability of default

C. Loss given default

D. Modified duration

Answer(s): A

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7. In the United States, during the second quarter of 2009, transactions in foreign exchange derivative contracts comprised approximately what proportion of all types of derivative transactions between financial institutions?

A. 2%

B. 7%

C. 25%

D. 43%

Answer(s): B

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8. Which one of the following four model types would assign an obligor to an obligor class based on the risk characteristics of the borrower at the time the loan was originated and estimate the default probability based on the past default rate of the members of that particular class?

A. Dynamic models

B. Causal models

C. Historical frequency models

D. Credit rating models

Answer(s): C

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9. According to a Moody's study, the most important drivers of the loss given default historically have been all of the following EXCEPT:
I) Debt type and seniority
II) Macroeconomic environment
III) Obligor asset type
IV) Recourse

A. I

B. II

C. I, II

D. III, IV

Answer(s): D

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10. To quantify the aggregate average loss for the credit portfolio and its possible constituent subportfolios, a credit portfolio manager should use the following metric:

A. Credit VaR

B. Expected loss

C. Unexpected loss

D. Factor sensitivity

Answer(s): B

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11. Of all the risk factors in loan pricing, which one of the following four choices is likely to be the least significant?

A. Probability of default

B. Duration of default

C. Loss given default

D. Exposure at default

Answer(s): B

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12. Gamma Bank provides a $100,000 loan to Big Bath retail stores at 5% interest rate (paid annually). The loan also has an annual expected default rate of 2%, and loss given default at 50%. In this case, what will the bank's expected loss be? What is the expected loss of this loan?

A. $300

B. $550

C. $750

D. $1,050

Answer(s): D

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13. A credit analyst wants to determine if her bank is taking too much credit risk.
Which one of the following four strategies will typically provide the most convenient approach to quantify the credit risk exposure for the bank?

A. Assessing aggregate exposure at default at various time points and at various confidence levels

B. Simplifying individual credit exposures so that they can be combined into a simplified expression of portfolio risk for the bank

C. Using stress testing techniques to forecast underlying macroeconomic factors and bank's idiosyncratic risks

D. Analyzing distribution of bank's credit losses and mapping credit risks at various statistical levels

Answer(s): A

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14. Typically, which one of the following four option risk measures will be used to determine the number of options to use to hedge the underlying position?

A. Vega

B. Rho

C. Delta

D. Theta

Answer(s): C

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15. What is the explanation offered by the liquidity preference theory for the upward sloping yield curve shape?

A. The long term rates must rise enough to get some borrowers to borrow short-term and some lenders to lend long-term.

B. The long term rates must rise enough to get some borrowers to borrow long-term and some lenders to lend short-term.

C. The short term rates must rise enough to get some borrowers to borrow short-term and some lenders to lend long-term.

D. The short term rates must fall enough to get some borrowers to borrow long-term and some lenders to lend short-term.

Answer(s): A

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16. Which one of the following four options is NOT a typical component of a currency swap?

A. An initial currency exchange of the notional amount

B. Denomination of the original notional amount into a foreign currency

C. Periodic exchange of interest payments in different currencies

D. A final currency exchange

Answer(s): B

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17. Which one of the following four options correctly identifies the core difference between bonds and loans?

A. These instruments receive a different legal treatment.

B. These instruments have different pricing drivers.

C. These instruments cannot be used to estimate credit capital under provisions of the Basel II Accord.

D. These instruments are subject to different credit counterparty regulations.

Answer(s): A

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18. Which of the following factors would typically increase the credit spread?
I) Increase in the probability of default of the issuer.
II) Decrease in risk premium.
III) Decrease in loss given default of the issuer.
IV) Increase in expected loss.

A. I

B. II and III

C. I and IV

D. I, II, and IV

Answer(s): C

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19. Which one of the following four mathematical option pricing models is used most widely for pricing European options?

A. The Black model

B. The Black-Scholes model

C. The Garman-Kohlhagen model

D. The Heston model

Answer(s): B

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20. Which one of the following four formulas correctly identifies the expected loss for all credit instruments?

A. Expected Loss = Probability of Default x Loss Given Default x Exposure at Default

B. Expected Loss = Probability of Default x Loss Given Default + Exposure at Default

C. Expected Loss = Probability of Default x Loss Given Default - Exposure at Default

D. Expected Loss = Probability of Default x Loss Given Default / Exposure at Default

Answer(s): A
