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**MEASURING AND MANAGING
MARKET RISK**

1. Which of the following approaches to conducting scenario analysis on a portfolio of stock options is most accurate?
 - (A) Evaluate the impact on the portfolio owing to changes in delta.
 - (B) Evaluate the impact on the portfolio owing to changes in volatility.
 - (C) Value the portfolio based on the parameters identified in the scenario.

2. Which of the following is closest to 5% daily VaR for the data included in Exhibit 1?
 - (A) £126,000.
 - (B) £156,000.
 - (C) £186,000.

3. Which of the following is most accurate about Smith's comments?
 - (A) Only comment 1 is correct.
 - (B) Only comment 2 is correct.
 - (C) Both comments are incorrect.

4. Manning's paragraph detailing the historic simulation method is:
 - (A) correct.
 - (B) incorrect about VaR calculation.
 - (C) incorrect regarding the application to portfolios containing options.

5. How many of Manning's limitations of VaR are incorrect?
 - (A) 1 limitation.
 - (B) 2 limitations.
 - (C) 3 limitations.

6. With regards to convexity and gamma, which of the following statements are most accurate?
 - (A) Both are second order effects value arising from changes in underlying risk factors to the change in value of the asset.
 - (B) Convexity is a first order effect while gamma is a second order effect arising from changes in underlying risk factors to the change in value of the asset.
 - (C) Convexity is a second order effect while gamma is a first order effect arising from changes in underlying risk factors to the change in value of the asset.

7. Marginal Var is least likely to be:
- (A) change in VaR due to very small change in asset position.
 - (B) conceptually similar to incremental VaR
 - (C) change in VaR due to change in probability.
8. Which of the following is most likely an example of a stop loss limit?
- (A) Maximum daily VaR of \$1.5 million.
 - (B) Maximum tracking error of 3%.
 - (C) Liquidate the portfolio if the portfolio value falls below \$100 million.
9. Which of the following risk measures are most likely to be used by a traditional asset manager?
- (A) Maximum drawdown
 - (B) Surplus at risk
 - (C) Active share.
10. Which of the following is a limitation of scenario analysis?
- (A) Scenario analysis does not provide the probability of a specific scenario occurring.
 - (B) The relationship between portfolio value and the risk factors used may not be static.
 - (C) Scenario analysis does not account for "fat tail" problem of the return distribution.
11. Assuming that the returns distribution of a portfolio is normal, using the parametric method of estimation of VaR needs which of the following inputs:
- (A) mean, standard deviation and size of the lookback period.
 - (B) mean and standard deviation.
 - (C) mean, standard deviation, and kurtosis.
12. A portfolio has a 5% monthly VaR of \$2.5 million dollar. Which of the following is most accurate?
- (A) There is a 95% chance of losing \$2.5 million in 5% of the months.
 - (B) There is a 5% chance of loss in portfolio value of at least \$2.5 million in a month.
 - (C) There is a 5% chance of losing \$2.5 million every month.
13. A firm's economic capital is most accurately described as:
- (A) capital needed to overcome severe losses in the business.
 - (B) assets minus VaR.
 - (C) fair value of plan assets less fair value of liabilities.

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14. Which of the following is most accurately a limitation of the historical simulation method?
- (A) Estimates of mean and standard deviation may be inaccurate.
 - (B) The size of the lookback period may be too small.
 - (C) The behavior of returns over the lookback period may not accurately capture the future.
15. Delphia fund is a €100 million portfolio of euro zone equities. The expected daily return and standard deviation are 0.116% and 0.38% respectively. The 5% daily VaR is €511,000. Assuming 21 trading days per month, The 5% monthly VaR is closest to:
- (A) €829,446
 - (B) €3,801,000
 - (C) €435,000
16. Sophia fund is a €200 million portfolio of euro zone equities. The expected daily return and standard deviation are 0.179% and 0.22% respectively. The 5% daily VaR is closest to:
- (A) € 37,400,000
 - (B) € 82,000
 - (C) € 368,000
17. Which of the following risk measures are most likely to be used by a hedge fund?
- (A) Maximum drawdown.
 - (B) Surplus at risk.
 - (C) Glidepath.
18. Conditional VaR is most accurately measured as:
- (A) Average VaR in the tails of the return distribution.
 - (B) Average VaR in the tails of the value distribution.
 - (C) Average VaR given that losses to the extent of VaR has occurred.
19. A fixed income portfolio manager utilizes duration as a risk measure for the portfolio. The portfolio manager is most likely:
- (A) using sensitivity analysis.
 - (B) using partial analysis.
 - (C) using scenario analysis.
20. Which one of the following is NOT a limitation of VaR?
- (A) VaR computed during periods of unusually low volatility may underestimate actual VaR.
 - (B) VaR based risk limits may be inappropriate in trending markets.
 - (C) Incorporates only right tail risk.

