1. If the top management of a large firm finds that the overall risk of the firm's portfolios has changed, which of the following would NOT be a likely reason?

    A. Many of the managers have unknowingly made very different style bets.
    B. Individual managers have exceeded their risk budget.
    C. The overall markets have become more volatile.
    D. Rogue traders have made unauthorized trades.

2. Which of the following statements about the Sortino ratio are valid?

    I. The Sortino ratio is more appropriate for asymmetrical return distributions.
    II. The Sortino ratio compares the portfolio return to the return of a benchmark portfolio.
    III. The Sortino ratio allows one to evaluate portfolios obtained through an optimization algorithm that uses variance as a risk metric.
    IV. The Sortino ratio is defined on the same principles as the Sharpe ratio, but the Sortino ratio replaces the risk free rate with the minimum acceptable return and the standard deviation of returns with the standard deviation of returns below the minimum acceptable return.

    A. I and III.
    B. II and III.
    C. I, III and IV.
    D. I and IV.

3. A portfolio has an average return over the last year of 13.2%. Its benchmark has provided an average return over the same period of 12.3%. The portfolio’s standard deviation is 15.3%, its beta is 1.15, its tracking error volatility is 6.5% and its semi-standard deviation is 9.4%. Lastly the risk free rate is 4.5%.Calculate the portfolio’s Information Ratio (IR).

    A. 0.138
    B. 0.076
    C. 0.569
    D. 0.096

4. Suppose the daily returns of a portfolio and a benchmark portfolio it is replicating are as follows: Portfolio Return (bps) Benchmark Portfolio Return (bps) Day 1 34 30 Day 2 -89 -87Day 3 108 102Day 4 70 70 What is the tracking error over the four day period?

    A. 2 bps
    B. 10 bps
    C. 2.39 bps
    D. 3.16 bps

5. A bank credit officer, who has reviewed a loan application, has made the following statement:"On a stand alone basis, I was not very keen on granting this loan however, I granted this loan after looking at the overall asset portfolio of the bank." Based on the above statement, which of the following is true.

   A. The correlation of the newly granted loan with the overall portfolio is high and therefore the credit officer was right in granting the loan.
   B. The correlation of the newly granted loan with the overall portfolio is low and therefore the credit officer was wrong in granting the loan.
   C. The correlation of the newly granted loan with the overall portfolio is low and therefore the credit officer was right in granting the loan.
   D. The correlation of the newly granted loan with the overall portfolio is high and therefore the credit officer was wrong in granting the loan.

6. If interest rates rise, a bank with a positive maturity gap will experience:

   A. Either a gain or a loss of equity capital.
   B. A loss of equity capital.
   C. A gain in equity capital.
   D. No change in equity capital.

7. One of your colleagues believe that risk management is driven by well – meaning regulators but it does not create economic value. Which of the following concepts would not be helpful to persuade him that risk management can create value for the firm?

   A. Tax rational when income is taxed differently at different levels of income
   B. Home made hedging for well-diversified shareholders
   C. Debt overhang mitigation
   D. Deadweight costs of financial distress and bankruptcy

8. In perfect capital markets, managers will be rewarded by shareholders for decreasing the firm's diversifiable risk

   A. Regardless of the cost.
   B. Under no conditions.
   C. If the cost of reducing diversifiable risk is zero.
   D. If the cost of reducing diversifiable risk is sufficiently low.

9. When there are risky assets and a risk-free asset available, investors can achieve the best combinations of risk and return by holding:

   A. The market portfolio. Incorrect

B. Some combination of the risk-free asset and the market portfolio of risky assets. Correct

C. Some combination of the efficient portfolios of risky assets. Incorrect
D. Some combination of the risk-free asset and any of the efficient portfolios of risky assets. Incorrect

10. For the past four years, the returns on a portfolio were 6%, 9%, 4%, and 12%. The corresponding returns of the benchmark were 7%, 10%, 4%, and 10%. The minimum acceptable return is 7%. The portfolio's Sortino ratio is:

    A. 0.6700.
    B. 0.5303.
    C. 0.4743.
    D. 0.2143.

11. In the presence of taxes, risk management activities can create value by:

    A. Minimizing each year's taxable income.
    B. Shifting the realization of taxable income from years when it is low to years when it is high.
    C. Shifting the realization of taxable income from years when it is high to years when it is low.
    D. Postponing taxes indefinitely.

12. Which of the following is not a limitation of using the Capital Asset Pricing Model to measure equity requirements for operational risk?

    A. Time lags in variables like tax and regulation being reflected in historical beta estimates
    B. Measurement error in separately measuring levered and un-levered beta.
    C. Requires detailed knowledge of profit and loss accounting to go from beta to a specific measure of operational risk.
    D. All of the above.

13. An analyst has compiled the following information on a portfolio:

    Sortino Ratio: 0.82
    Beta: 1.15
    Expected return: 12.2%
    Standard deviation: 16.4%
    Benchmark return: 11.9%
    Risk-free rate: 4.75%
    Calculate the semi-standard deviation of the portfolio?

    A. 8.2%

B. 14.9%
C. 0.4%
D. 9.08%

14. Assume that a portfolio underperformed its benchmark by 2% in the most recent month. In this scenario,

    A. Alpha may be positive or negative depending upon Beta and Risk Free Rate.
    B. Alpha is 2%.
    C. Alpha is "-2%" as it refers to the Outperformance / Underperformance Gap.
    D. Due to underperformance, Alpha is definitely negative and cannot be positive.

15. Systemic risk is

    A. VaR of a traded portfolio
    B. Credit risk of a traded portfolio
    C. Technology risk
    D. None of the above

16. An investment manager is given the task of beating a benchmark. Hence, the risk should be measured

    A. St1: In terms of loss relative to the initial investment
    B. St2: In terms of loss relative to the expected portfolio value
    C. St3: In terms of loss relative to the benchmark
    D. St4: In terms of loss attributed to the benchmark

17. The AT&T pension fund has 68%, or about $13 billion invested in equities. Assume a normal distribution and volatility of 15% per annum. The fund measures absolute risk with a 95%, one-year VAR, which gives $3.2 billion. The pension plan wants to allocate this risk to two equity managers, each with the same VAR budget. Given that the correlation between managers is 0.5, the VAR budget for each should be

    A. St1: $3.2 billion
    B. St2: $2.4 billion
    C. St3: $1.9 billion
    D. St4: $1.6 billion

18. Every year, BusinessWeek reports the performance of a group of existing equity mutual funds, selected for their popularity. Taking the average performance of this group of fund will create

    A. St1: Survivorship bias only
    B. St2: Selection bias only
    C. St3: Both survivorship and selection bias
    D. St4: Instant-history bias only

19. TheAT&T pension fund reports total assetsworth $19.6 billion and liabilities of $17.4 billion. Assume the surplus has a normal distribution and volatility of 10% per annum. The 95% surplus at risk over the next year is

    A. $360 million
    B. $513 million
    C. $2,860 million
    D. $3,220 million

20. Which concept gives a measure of historical value added per unit of risk taken and can be useful, among other tools, to risk managers?

    A. Tracking error
    B. Model alpha
    C. Information ratio
    D. Heteroskedasticity