CFE: Level 1
Sample Questions Set #5

The following are the sample questions that are illustrative of the questions that may be asked in a CFE Level 1 examination. These questions are only for illustration.

Note: *(i) Each question carries 5 marks*
(ii) In the actual exam, every wrong answer would earn -3 (negative 3) marks;
(iii)Use of Excel™ spreadsheet, even though not essential, may prove useful for answering some of the questions. No more than 20% of the total questions may require the use of Excel spreadsheet.

1. Of all the theories (disciplines) below which one is totally linear:

   (a) Quantum Mechanics
   (b) Evolutionary Biology
   (c) Meteorology
   (d) Finance

2. A trader looks at the daily chart of a stock price and finds that its shape is exactly the same as the shape of a yearly chart of that stock. He therefore concludes that:

   (a) markets are fractal in nature
   (b) markets follow random walk
   (c) markets are always in equilibrium
   (d) none of the above;

3. Rho (ρ), the sensitivity of an option to the interest rate, is proportional to **T**, the time to maturity of an option, whereas vega (ν), the sensitivity of an option to the volatility of the asset, is proportional to the square root of **T** $\left(\sqrt{T}\right)$. Therefore, in the long run:

   (a) Volatility risks will dominate interest rate risks
   (b) Interest rate risks will dominate volatility risks
   (c) both volatility risk and interest rate risk will become equal
   (d) None of the above;

4. Given the constant volatility assumption of Black-Scholes model, which of the following risk sensitivities (greeks) are inconsistent with the model assumption:

   (a) vega
   (b) gamma
   (c) rho
   (d) both (a) and (c);

5. The value of a vanilla call option on an asset is $3.00. The value of a corresponding fixed strike (same strike as the vanilla) lookback call would be:

   (a) $6.00
   (b) $1.50
   (c) $9.00
   (d) $4;50

6. VWAP (Volume Weighted Average Price)

   (a) an algorithmic trading strategy for cash equities;
   (b) can be used to determine the structure of the trading day;
   (c) is used for settlement of all FROs (fixed return options);
   (d) all the above;

7. In a world of three currency pairs, Euro-Dollar, Dollar-Yen, and Euro-Yen, if the implied correlation between Euro-Dollar and Dollar-Yen remain constant and the implied volatilities of Euro-Dollar and Dollar-Yen both increase then the volatility of Euro-Yen will:

   (a) remain constant
   (b) increase
   (c) decrease
   (d) cannot be computed:

8. For Asian options which of the following is a “secondary” market risk:

   (a) skew
   (b) term structure of rates
   (c) term structure of volatility
   (d) variance ration

9. A Swaption has one of the following characteristics:

   (a) it is an option on a swap
   (b) it is not decomposable into any smaller units
   (c) it is similar to an option on a basket
   (d) all the above

10. A smart and an experienced proprietary trader knows that:

    (a) the ratio of luck to skills decreases with transaction frequency
    (b) the ratio of luck to skills increases with transaction frequency
    (c) the ration of luck to skills remains the same regardless of transaction frequency;
    (d) the ratio of luck to skills has no discernible pattern;

Notes & Explanations: