**Fin 3014 Quiz: Chapter 6**

1. Based upon the following risk and return characteristics, what best describes the expected return of Stock A:

<table>
<thead>
<tr>
<th>Stock</th>
<th>Expected Return</th>
<th>Systematic Risk</th>
<th>Unsystematic Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>?</td>
<td>5 units</td>
<td>5 units</td>
</tr>
<tr>
<td>B</td>
<td>10%</td>
<td>5 units</td>
<td>10 units</td>
</tr>
</tbody>
</table>

a. 20%
b. 15%
c. 10%*
d. 5%

2. From 1900 through 2003, which asset class had the lowest cumulative return?
   a. equities
   b. corporate bonds
   c. U.S. Government Treasury bonds
   d. U.S. Government Treasury bills*

3. If you assume a normal distribution, what is the probability that the return in any given year will be less than the expected return?
   a. 34%
   b. 50%*
   c. 66%
   d. 95%

4. You purchased a stock for $110 one year ago and the stock generated a 20% total return during the year. If you received a dividend of $20 on the stock then what is the current price of the stock?
   a. $132.00
   b. $120.00
   c. $112.00*
   d. $110.00

5. You plan on purchasing some property that will cost you $10,000 today. You anticipate receiving rent of $2,000 on the property during the year. You also expect to be able to sell the property for $11,000 at the end of the year. What is the total return on the investment?
   a. 30.00%*
   b. 20.00%
   c. 10.00%
   d. zero since the gain is realized.

6. You plan on purchasing some property that will cost you $10,000 today. You anticipate receiving rent of $2,000 on the property during the year. You also expect to be able to sell the property for $11,000 at the end of the year. What is the income related return on the investment?
   a. 30.00%
   b. 20.00%*
   c. 10.00%
   d. zero since the gain is realized.

7. You plan on purchasing some property that will cost you $10,000 today. You anticipate receiving rent of $2,000 on the property during the year. You also expect to be able to sell the property for $11,000 at the end of the year. What is the capital gain return on the investment?
   a. 30.00%
   b. 20.00%
   c. 10.00%*
   d. zero since the gain is realized.
8. In general terms, variance measures:
   a. what the probability is of being in a neighborhood of the mean.
   b. how disperse the mean of a distribution is.
   c. the dispersion of observations around the mean of the distribution.*
   d. none of the above.

9. If you were to plot the return on a risky asset class over time in addition to a less risky asset class over time you would expect:
   a. for the return on the risky asset class to always be above that of the less risky asset class.
   b. for the return on the risky asset class to be just about the same as that of the less risky asset class.
   c. for the return on the risky asset class to never be above that of the less risky asset class.
   d. for the return on the risky asset class to usually but not always be above that of the less risky asset class.*

10. One year ago you purchased a 6-year 8% coupon bond (semi-annual payments) with a yield-to-maturity of 8%. Today the market is giving a yield-to-maturity on this bond of 7%. What is the capital gain return on this bond?
   a. 3.10%
   b. 4.16%*
   c. 12.10%
   d. 12.16%

11. Asset A has generated returns of 10%, -30%, 50%, and 70% over the last four years. What is the arithmetic and geometric expected return of Asset A?
   a. 0.60 0.60
   b. 0.40 0.36
   c. 0.25 0.25
   d. 0.25 0.18*

12. Asset A has generated returns of 10%, -30%, 50%, and 70% over the last four years. What is the standard deviation of the returns of Asset A?
   a. 0.4435*
   b. 0.2582
   c. 0.1000
   d. 0.0667

13. Which of the following is a characteristic of a well diversified portfolio?
   a. very little systematic risk.
   b. very little unsystematic risk.*
   c. no systematic risk.
   d. none of the above.

14. Stocks A, B, and C have systematic risk of 3 units, 4 units, and 5 units while they have a total risk of 20 units, 15 units, and 10 units, respectively. If all three assets are expected to generate the same level of cash flow in the future, then which asset should have the lowest price today?
   a. A
   b. B
   c. C*
   d. there is not enough information to decide.

15. For a stock that does not pay dividends the total return may be estimated by:
   a. the stock’s income return.
   b. the stock’s capital gain yield.
   c. the income yield.
   d. none of the above.