Finance 352 – Investments I  
Review Notes for Final Exam

Chapter 15  
1. Option contract: concepts  
2. Option trading: concepts and calculations  
3. Values of options at expiration: concepts and calculations  
4. Options vs. stock investments: concepts and calculations  
5. Option strategies: concepts and calculations  
6. Option-like securities  
7. Homework problems and examples discussed in class

Chapter 17  
1. Futures contract: concepts  
2. Trading mechanics: concepts  
3. Futures market strategies: concepts  
4. Futures prices: concepts and calculations  
5. Financial futures  
6. Homework problems and examples discussed in class

Chapter 18  
1. Risk-adjusted returns: concepts and calculations  
The Sharpe Index = \( (r_p - r_F) / \sigma_p \)  
The Jensen Index: \( \alpha_p = r_p - (r_F + (r_m - r_F) \beta_p) \)  
The Treynor Index = \( (r_p - r_F) / \beta_p \)  
\( M^2 \) measure: adjust the total risk using CML  
\( T^2 \) measure: adjust the market risk using SML  
2. Portfolio management  
Active vs. passive  
3. Homework problems and examples discussed in class

Chapter 19  
1. Global equity markets  
2. Risk factors in international investing  
3. International diversification: concepts  
4. Exchange rate risk and political risk  
   Exchange rate parity: concepts and calculations  
5. Homework problems and examples discussed in class
Sample Problems

1. You purchase one IBM July 180 call contract for a premium of $5. You hold the option until the expiration date, when IBM stock sells for $183 per share. You will realize a ______ on the investment.

   A. $200 profit  
   B. $200 loss  
   C. $300 profit  
   D. $300 loss

2. You purchase one IBM July 185 call contract for a premium of $5. You hold the option until the expiration date, when IBM stock sells for $183 per share. You will realize a ______ on the investment.

   A. $200 profit  
   B. $200 loss  
   C. $500 profit  
   D. $500 loss

3. You purchase one IBM July 180 put contract for a premium of $3. You hold the option until the expiration date, when IBM stock sells for $175 per share. You will realize a ______ on the investment.

   A. $300 profit  
   B. $300 loss  
   C. $500 loss  
   D. $200 profit

4. Intermediate 9 and 10 in Chapter 15

5. CFA 1 in Chapter 15

6. A person with a long position in a commodity futures contract wants the price of the commodity to ______.

   A. decrease substantially  
   B. increase substantially  
   C. remain unchanged  
   D. increase or decrease substantially
7. If an asset price declines, the investor with a _______ is exposed to the largest potential loss.

A. long call option
B. long put option
C. long futures contract
D. short futures contract

8. Given the following trading activities, what is the open interest at the end of each day?

<table>
<thead>
<tr>
<th>Time</th>
<th>Actions</th>
<th>Open Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>t = 0</td>
<td>Trading opens for gold contract</td>
<td>0</td>
</tr>
<tr>
<td>t = 1</td>
<td>Trader A buys 2 and trader B sells 2 gold contracts</td>
<td>2</td>
</tr>
<tr>
<td>t = 2</td>
<td>Trader A sells 1 and trader C buys 1 gold contract</td>
<td>2</td>
</tr>
<tr>
<td>t = 3</td>
<td>Trader D sells 1 and trader C buys 1 gold contracts</td>
<td>3</td>
</tr>
</tbody>
</table>

9. Intermediate 8 and 9 in Chapter 17

10. CFA 1-4 in Chapter 17.

11. Which one of the following performance measures is the Sharpe ratio?

A. Average excess return to beta ratio
B. Average excess return to standard deviation ratio
C. Alpha to standard deviation of residuals ratio
D. Average return minus required return

12. The M² measure is a variant of ________________.

A. the Sharpe measure
B. the Treynor measure
C. Jensen's alpha
D. the appraisal ratio

13. A managed portfolio has a standard deviation equal to 22% and a beta of .9 when the market portfolio's standard deviation is 26%. The adjusted portfolio P* needed to calculate the M² measure will have _______ invested in the managed portfolio and the rest in T-bills.

A. 84.6%
B. 118%
C. 18%
D. 15.4%
14. The risk-free rate, average returns, standard deviations, and betas for three funds and the S&P 500 are given below.

<table>
<thead>
<tr>
<th>Fund</th>
<th>Avg</th>
<th>Std Dev</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>18%</td>
<td>30%</td>
<td>1.05</td>
</tr>
<tr>
<td>B</td>
<td>25%</td>
<td>35%</td>
<td>1.3</td>
</tr>
<tr>
<td>C</td>
<td>20%</td>
<td>25%</td>
<td>1.2</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>15%</td>
<td>20%</td>
<td>1.0</td>
</tr>
<tr>
<td>rf</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is the Treynor measure for portfolio A?

A. 12.38%
B. 8.38%
C. 6.91%
D. 3.64%

15. CFA 1 and 2 in Chapter 18

16. Which one of the following country risks includes the possibility of expropriation of assets, changes in tax policy, and restrictions on foreign exchange transactions?

A. Default risk
B. Foreign exchange risk
C. Market risk
D. Political risk

17. Suppose the 6-month risk-free rate of return in the United States is 5%. The current exchange rate is 1 pound = US$2.05. The 6-month forward rate is 1 pound = US$2. The minimum yield on a 6-month risk-free security in Britain that would induce a U.S. investor to invest in the British security is ________.

A. 5.06%
B. 6.74%
C. 8.48%
D. 10.13%

\[
\frac{1 + (0.05/2)}{1 + (r/2)} = \frac{2.00}{2.05}; \quad r = 10.125\%
\]

18. Intermediate 5, 6 and 13 in Chapter 19