**IFN 310 STUDY QUESTIONS**

**1)**What is the present value of your trust fund if you have projected that it will provide you with $50,000 7 years from today and it earns 10% compounded annually?

A) $25,000.00   
 **B) $25,657.91**  
 C) $28,223.70  
 D) $29,411.76

**2)** Assume the total expense for your current year in college equals $20,000. How much would your parents have needed to invest 21 years ago in an account paying 8% compounded annually to cover this amount?

A) $952.46   
 B) $1,600.00  
 C) $1,728.08  
 **D) $3,973.11**

**3)** How much must be invested today in order to generate a 5-year annuity of $1,000 per year, with the first payment 1 year from today, at an interest rate of 12%?

**A) $3,604.78**   
 B) $3,746.25  
 C) $4,037.35  
 D) $4,604.78

**4)** Approximately how much must be saved for retirement in order to withdraw $100,000 per year for the next 25 years if the balance earns 8% annually, and the first payment occurs one year from now?

**A) $1,067,477.62**   
 B) $1,128,433.33  
 C) $1,487,320.09  
 D) $1,250,000.00

**5)** How much do you need when you retire to provide a $2,500 monthly check that will last for 25 years? Assume that your savings can earn 0.5% a month.

A) $361,526.14   
 **B) $388,017.16**  
 C) $402,766.67  
 D) $414,008.24

**6)** If a borrower promises to pay you $1,900 nine years from now in return for a loan of $1,000 today, what effective annual interest rate is being offered if interest is compounded annually?

A) 5.26%   
 **B) 7.39%** C) 9.00%  
 D) 10.00%

**7)** The salesperson offers, "Buy this new car for $25,000 cash or, with an appropriate down payment, pay $500 per month for 48 months at 8% interest." Assuming that the salesperson does not offer a free lunch, calculate the "appropriate" down payment.

A) $1,000.00   
 **B) $4,519.04** C) $5,127.24  
 D) $8,000.00

**8)** You will be receiving cash flows of: $1,000 today, $2,000 at end of year 1, $4,000 at end of year 3, and $6,000 at end of year 5. What is the present value of these cash flows at an interest rate of 7%?

A) $9,731.13   
 **B) $10,412.27** C) $10,524.08  
 D) $11,524.91

**9)** Your retirement account has a current balance of $50,000. You plan to add $6,000 a year to the account for each of the next 30 years. Use a financial calculator or Excel to find what interest rate you need to earn in order to have $1,000,000 in the account at the end of the 30 years.

A) 5.02%   
 **B) 7.24%**  
 C) 9.80%  
 D) 10.07%

**10)** How much must be saved at the end of each year for the next 10 years in order to accumulate $50,000, if you can earn 9% annually? Assume you contribute the same amount to your savings every year.

**A) $3,291.00**   
 B) $3,587.87  
 C) $4,500.33  
 D) $4,587.79

**11)** Your real estate agent mentions that homes in your price range require a payment of $1,200 per month for 30 years at 0.75% interest per month. What is the size of the mortgage with these terms?

A) $128,035.05   
 B) $147,940.29  
 **C) $149,138.24**  
 D) $393,120.03

**12)** What is the minimum nominal rate of return that you should accept if you require a 4% real rate of return and the rate of inflation is expected to average 3.5% during the investment period?

A) 7.36%   
 B) 7.50%  
 **C) 7.64%**  
 D) 8.01%

**13)** What is the expected real rate of interest for an account that offers a 12% nominal rate of return when the rate of inflation is 6% annually?

A) 5.00%   
 **B) 5.66%** C) 6.00%  
 D) 9.46%