Student ID................................

EE431 Economics of Financial Markets and Institutions
Problem Sets: Debt Market and Structure of Interest Rate (1)

Please submit at the BE office, 5th floor department of Economics building.

Deadline of submission : February 3, 2015, before 15.00 hrs.

Late submission will not be accepted.

Do all questions on your own by using the present value tables.

1. Describe the time value of money concept and how it affects your investment programs.

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2. Suppose the market interest rate is 10%, find the present value of the following securities

   (a) Security A will pay $1100, one year from now (at year 1).
   (b) Security B will pay $1210, two years from now (at year 2).
   (c) Security C will pay $1310. three years from now (at year 3).

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3. Suppose the market interest rate is 8%. Find the present value of a 20 years fixed payment loan, which pays 20,000 Baht at the end of each year.

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4. Suppose the market interest rate is 8%. A 10 years fixed payment loan with present value $1,342,016. The equal fixed payment is paid annually. Find the annual payment of this fixed payment loan.

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5. You are buying your first car for 1,250,000 Baht, and are paying \$250,000 as a down payment. You have arranged to finance the remaining 1,000,000 Baht 10-year mortgage with a 6% nominal interest rate and yearly payments. What are the equal yearly payments you must make?

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6. What is yield to maturity (YTM)?

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7. Consider a 5.5% coupon bond with the par value of 1,000 Baht, selling for 863.38505 Baht. The bond will mature in 15 years. The coupon payment is made annually.

   (a) Calculate the yield to maturity.

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   (b) Later in the same year, the bond interest rate is fallen to 5%. What is the price of the 5.5% coupon bond?

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8. Suppose an investor who has 1,000 Baht is considering buying one of 3 years bonds:

   - Bond A has 1,000 Baht face value, 12% annual coupon, 10% yield to maturity.
   - Bond B has 100 Baht face value, 10% annual coupon, 12% yield to maturity.

   Assume that the investor can buy fractions of a bond. If the investor plans to hold the bond until its maturity, which bond the investor should buy to get more returns? Explain the reason.

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