

Due: June 02, 2011

**Econ 2002A**  
**Assignment.2**  
**Total marks: 10**

**Answer the following questions**

1. **(6 marks)** State whether each of the following statements is true or false. Using appropriate **diagrams**, **explain** your response.
  - a. The steeper the demand curve, the lower the elasticity of demand.
  - b. Substitution effect is always greater than the income effect.
  - c. An increase in the interest rate will necessarily make a borrower borrow less.
  
2. **(2 marks)** Using **diagrams**, **explain** the difference between compensating variation and equivalent variation
  
3. **(2 marks)** Nick has an income of \$15,000 this year and he expects an income of \$20,000 next year. He can borrow and lend money at an interest rate of 5%. Consumption goods cost \$1 per unit this year and there is no inflation.
  - i) What is the present value of Nick's endowment? What is the future value of his endowment? Draw his intertemporal budget line.
  - ii) Suppose Nick has a utility of  $U(C_0, C_1) = C_0^{0.5} C_1^{0.5}$ . What is Nick's consumption in period 0? What about period 1? Using a diagram, show how much Nick would borrow or save.