## ANSWER OUTLINE

**ECONOMICS 353** 

L. Tesfatsion/Fall 07

**EXERCISE 5: 6 Questions (8 Points Total)** 

DUE: Tues., October 9, 2007, 2:10pm

\*\*IMPORTANT REMINDER: LATE ASSIGNMENTS WILL NOT BE ACCEPTED – NO EXCEPTIONS\*\*

## **EXERCISE INSTRUCTIONS:**

- (1) Please fill in your name and student ID number on Side 1 of your bubble sheet and write **353 Exercise 5** in the top margin of Side 1.
- (2) Use a number 2 pencil to **mark your answers** on Side 1 of the bubble sheet to the first five questions Q1 through Q5, below, which are in multiple choice format.
- (3) The sixth question Q6 is a Web Exercise that asks you to find and report data relating to the new College Cost Reduction and Access Act signed into law in the U.S. on Thursday, September 27, 2007. Please put your name and student ID number at the top of your print-out sheet for Q6 along with 353 Exercise 5 and separately hand in this print-out sheet for Q6 in addition to your answer bubble sheet for questions Q1 through Q5.
- (4) Each question Q1 through Q5 is worth 1 point, and Q6 is worth 3 points.
- Q1 (1 point). Which of the following are true in general for coupon bonds?
  - **A.** For a coupon bond, its coupon rate is less than its yield to maturity if and only if its purchase price is less than its face value.
  - **B.** All else equal, the purchase price and yield to maturity for a coupon bond are inversely related (one is high when the other is low).
  - C. When a coupon bond is priced at its face value, its yield to maturity is zero.
  - **D.** All of the above are true.
  - **E** E. Only A and B are true.
- **Q2** (1 Point). Which of the following \$1000 face-value securities has the LOWEST yield to maturity?
  - **A.** A coupon bond with a 15% coupon rate selling for \$900
  - **B** B. A coupon bond with a 5% coupon rate selling for \$1,000
    - C. A coupon bond with a 15% coupon rate selling for\$1,000
    - **D.** A coupon bond with a 10% coupon rate selling for \$1,000

- Q3. Referring to the T-Bonds/Notes data reported on page 81 of Mishkin (Chapter 4) from the Wall Street Journal, which of the following statements are TRUE:
  - **A.** These data support the claim that dealers make their profits by posting bid (buy) prices that are higher or lower than asked (sale) prices, as the situation warrants.
  - **B.** Bid and asked prices are quoted per \$100 of face value, so numbers less than 100 correspond to prices less than face value and vice versa.
  - C. These data support the claim that the coupon rate of a coupon bond is greater than its (ask) yield to maturity if and only if the purchase price of the bond is greater than its face value.
  - **D.** All of the above.
  - **E** E. Only B and C.
- Q4 (1 Point). INTEREST RATE RISK is the risk faced by \_\_\_\_ in the form of \_\_\_\_.
  - **A.** a potential lender; fluctuations in the purchase price of bonds.
  - **B** B. a bond owner; fluctuations in the yield to maturity, hence in the period-by-period return rate on the bond.
    - C. a person who has re-sold a bond in a secondary market; fluctuations in the interest payments the seller will have to make to the buyer.
    - **D.** a potential borrower; fluctuations in the interest payments the borrower will have to make to the lender.
    - **E.** a borrower who has already issued a bond; fluctuations in the interest payments the borrower will have to make to the bond holder.
- Q5 (1 Point). Treasury Inflation Protection Securities (TIPS) generate useful information for monetary policy makers because
  - A. the interest rate on TIPS always closely tracks the Federal Funds Rate.
  - **B.** the interest and principal payments on TIPS are adjusted for changes in the price level, hence the interest rate on TIPS provides a measure of the real interest rate.
  - C. the difference between the current market interest rate and the TIPS interest rate provides a measure of expected inflation.
  - **D.** all of the above.
  - **E** E. only B and C.

## SEE THE FOLLOWING PAGE FOR Q6: WEB EXERCISE

**Q6:** Web Exercise (3 Points Total). This Web Exercise asks you to research and report information related to the *College Cost Reduction and Access Act (H.R. 2669)*, signed into law by President Bush on Thursday, September 27, 2007. Each part below (A-C) is worth 1 point.

Please be sure to provide a complete citation for any source you use to obtain your answers to parts A-C below. If you research information from sources additional to the basic references provided below, please limit your information gathering to sources reasonably judged to be reliable (e.g. websites maintained by government and/or well-known corporations rather than blogs).

Your answers to Q6:Parts A-C below should be provided on a single answer sheet that is turned in along with your bubble sheet with answers to Q1-Q5 above.

## **Basic References:**

- [1 ] The SmartStudent Guide to Financial Aid, Citibank http://www.finaid.org/loans
- [2] Pat Wingert, "Student-Loan Secrets: A National Scandal Over For-Profit College Lending Deepens," Newsweek, April 16, 2007 http://www.msnbc.msn.com/id/17996046/site/newsweek/print/1/displaymode/1098/
- [3] "Summary of the College Cost Reduction and Access Act," National Association of Student Financial Aid Administration, posted 9/7/07 http://www.nasfaa.org/publications/2007/G2669Summary091007.html
- [4] "H.R. 2669-110th Congress (2007): Higher Education Access Act of 2007," GovTrack.us (database of federal legislation) http://www.govtrack.us/congress/bill.xpd?tab=main&bill=h110-2669
- **Part A.** Currently, what is the approximate percentage of 4-year undergraduates who graduate in the U.S. with some education loan debt? And what is the approximate average size of this debt among graduating seniors (excluding PLUS parent loans)?

Answer Outline for Part A: According to Ref.[1], approximately two-thirds (66%) of 4-year undergraduate students in the U.S. currently graduate with some education loan debt; and the average size of this debt among graduating seniors (exhuding PLUS parent loans but including Stafford, Perkins, state, college, and private loans) is approximately \$19,237.

**Part B.** Describe concisely but carefully the nature of the "student-loan scandal" uncovered this past Spring that has promoted corrective actions by the U.S. Congress.

Answer Outline for Part B: According to Ref.[2], in recent years college tuitions have soared while federal funding of student grants and loans has declined. At the same time,

the U.S. private student-loan industry has become an \$85 billion enterprise. Complaints to Congress prompted investigations into possible illegal kickbacks to schools by for-profit lenders in exchange for placement on these schools' "preferred lenders" lists; lenders on such a list typically receive most of a school's student loan business.

Part C. Describe concisely but carefully two key provisions of the College Cost Reduction and Access Act of 2007 that significantly affect student loans (e.g., Stafford and Perkins loans). If you yourself have a student loan, you might focus in particular on two provisions of this act that specifically affect the type of student loan you have.

Answer Outline for Part C: Ref.[3] and Ref.[4] highlight the main provisions of the College Cost Reduction and Access Act of 2007. Key provisions that significantly affect student loans include, among others:

- (a) Interest rate reductions;
- (b) Student loan deferment for certain armed forces members and deferral of loan repayment following active duty;
- (c) Income-based repayment, e.g., loan payments will be limited to 15% of a borrower's discretionary income or 15% of the amount that a borrower's (and spouse's if applicable) adjusted gross income exceeds 150% of the poverty line, divided by 12;
- (d) reductions in federal support of private lenders making Stafford Loans under the Federal Family Education Loan (FFEL) Program (e.g., reductions in the amount of insurance paid by the federal government to lenders on defaulted loans, increases in the loan fees paid to the Department of Education by lenders that the lenders cannot pass on to borrowers, etc.);
- (e) Increased provision for loan forgiveness on any Stafford Loan under the Federal Direct Student Loan (FDSL) Program in which loans are provided by the U.S. government directly to students and their parents.