## ANSWERS AT END

ECONOMICS 353
EXERCISE 7: Eight Questions (8 Pts Total)

L. Tesfatsion/Spring Semester 2011 DUE: Tues., March 8, 12:40pm

\*\*PLEASE NOTE: EXERCISES ARE DUE AT THE BEGINNING OF CLASS ON THE DUE DATE. LATE EXERCISES WILL NOT BE ACCEPTED AFTER DISCUSSION OF ANSWERS HAS BEGUN – NO EXCEPTIONS\*\*

- (1) Please fill in your name and student ID number on Side 1 of your red bubble sheet and write **353 Exercise 7** in the top margin of Side 1. (Red bubble sheets will be handed out in class each Tuesday and can also be obtained from the Econ Undergraduate Office in 174 Heady during normal business hours M-F.)
- (2) Use a number 2 pencil to **mark your answers** on Side 1 of the bubble sheet to the multiple-choice questions Q1 through Q8 below.
- (3) Each question is worth 1 point. Questions Q1-Q5 can be answered using required course materials for Mishkin Chapter 7. Questions Q6-Q8 on "The Public Coming Out of Facebook Not?" can be answered using the accompanying links to online readings.
- Q1 (1 Point). Consider stock shares having the following characteristics: The annual dividend paid per share is Div; the expected share price at the end of next year is PNext; and the required return on equity investment is k. Let "\*" denote multiplication, and let PNow denote the current share price. According to the ONE-PERIOD STOCK VALUATION MODEL (with one period = one year), PNow should satisfy the formula \_\_\_\_\_
  - **A.** PNow = (Div + PNext)\*(1 + k)
  - **B.** PNext PNow = Div/(1 + k)
  - C. PNext = (PNow + Div)\*k
  - **D.** PNow = (Div + PNext)/(1 + k)
- **Q2** (1 Point). If the GENERALIZED DIVIDEND MODEL presented in Mishkin Chapter 7 [Page 149, EQUATION (3)] is valid for a particular stock S, this implies \_\_\_\_\_
  - **A.** stock S will definitely pay positive dividends to its shareholders in future time periods.
  - **B.** there is no price bubble on stock S.
  - C. investors in stock S have strong-form rational expectations.
  - **D.** all of the above.
  - **E.** only B and C.

A. a constant required return on equity investment.
<b>B.</b> a constant inflation rate.
C. a constant dividend growth rate.
<b>D.</b> a constant share price.
Q4 (1 point). The key assumption characterizing the RATIONAL EXPECTATIONS approach to expectation formation is that
<b>A.</b> people make optimal use of whatever information they have when forming their expectations.
<b>B.</b> people do not make sudden changes in their expectations.
C. people do not make use of observations from the past in forming their expectations because these observations are out-of-date.
$\mathbf{D}.$ people are able to form expectations about future conditions without error.

Q3(1 point). The GORDON GROWTH MODEL simplifies the generalized dividend model by

A. financial investors exhibit perfect foresight.

for financial markets in its first (i.e., weakest) form asserts that

**B.** financial investors minimize their transactions and informational costs.

Q5 (1 Point). According to Mishkin (Chapter 7), the EFFICIENT MARKETS HYPOTHESIS

C. market demand equals market supply.

assuming \_\_\_\_\_.

**D.** investor expectations are equal to optimal forecasts using all available information.

SEE THE FOLLOWING PAGE FOR Q6-Q8.

- Q6-Q8: "The Public Coming Out of Facebook Not?" Please use the following required (\*\*) and recommended (\*) online readings to answer Q6-Q8 below.
- \*\* [1] "Mark Zuckerberg of Facebook is being touted as the new Steve Jobs, and his company as the next Google," *The Economist*, July 19, 2007 (print edition).
- www.econ.iastate.edu/classes/econ 353/tes fatsion/Facebook. Economist 2007.pdf
- \*\* [2] "Facebook and the 500-Person Threshhold," New York Times, January 3, 2011. www.econ.iastate.edu/classes/econ353/tesfatsion/FacebookSEC500ShareRule.NYTJan2011.pdf
- \*\* [3] "Is Facebook Really Worth \$50 billion?," The Economist, January 6, 2011.
- www.econ.iastate.edu/classes/econ 353/tes fatsion/Facebook GS 500 Shareholder Rule. Economist 2011.pdf the fatsion of the fa
- \*\* [4] "Goldman Sachs and Facebook,"  $\it The\ Economist, January\ 20,\ 2011.$
- www.econ.iastate.edu/classes/econ 353/tesfatsion/Goldman Sachs And Facebook. Economist 2011.pdf and Facebook and Faceboo
- \* [5] "Venture Capital in America: The Brighest and the Rest," *The Economist*, July 9, 2009. www.econ.iastate.edu/classes/econ353/tesfatsion/VentureCapInAmerica.Economist2009.pdf
- Q6 (1 Point). According to Ref.[1], Mark Zuckerberg's main objective for FACEBOOK is to \_\_\_\_
  - A. amass enough equity in Facebook to ensure a high per-share price for Facebook stock shares.
  - **B.** map out the real and pre-existing connections among people in the form of a "social graph" (or "social network").
  - C. provide a platform on top of which others can build new software tools and businesses.
  - **D.** All of the above.
  - E. Only B and C above.
- Q7 (1 Point). According to Refs.[2-3], Facebook (like Google) might ultimately end up offering its shares publicly through an Initial Public Offering (IPO). The reason given for this assertion is that Goldman Sachs' planned "special purpose vehicle" for permitting its super-wealthy clients to acquire privately-held Facebook shares is possibly in violation of the Security and Exchange Commission's 1964 500-PERSON RULE requiring that \_\_\_\_
  - **A.** any corporation that distributes stock shares has to have at least 500 shareholders.
  - **B.** any entity specializing in the provision of a "public good" (such as social network services) that has 500 or more persons as shareholders must be registered as a non-profit corporation.
  - C. any entity with total assets exceeding \$10 million and securities held of record by 500 or more persons has to register these securities with the SEC and file regular reports with the SEC (and the public) on its financial condition.
  - **D.** all corporations specializing in "public goods" (such as social networking services) that have 500 or more equity investors must be publicly held.

**Q8** (1 Point). According to Ref.[4], to avoid triggering the SEC's 500-PERSON RULE, Goldman Sachs has revised its planned "special purpose vehicle" for privately-held Facebook shares so that now \_\_\_\_\_

- A. its American clients and its own partners are excluded from participation.
- B. only its American clients and its own partners will be permitted to participate.
- C. Goldman Sachs has agreed to underwrite these shares with a guaranteed buy-back at face value.
- **D.** Goldman Sachs is promising to place all Facebook shares publicly through an IPO within five years.

Multiple Choice Answers: Q1-D, Q2-B, Q3-C, Q4-A, Q5-D, Q6-E, Q7-C, Q8-A