UNIVERSITY OF DUBLIN
TRINITY COLLEGE

FACULTY OF ARTS, HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF ECONOMICS

Junior Freshman **Hillary Term 2010**
BESS, TSM, BSL, MSISS,
Sociology and Social Policy

Introduction to Economics

1st March 2010 **Sports Centre** **14.00-15.30**

Dr Paul Scanlon

Answer **ALL** multiple choice questions in Section A; for each question, indicate the most reasonable answer. Section A carries **42 marks** (3 marks per question.)
Answer **BOTH** Questions in Section B. Each question in **Section B** carries **29 MARKS**.

Write in the answers to Section A on **both** this exam paper (where you circle the correct answer) and on the special MCQ form. You must submit both.
Enter your **8-digit student ID** in the space provided on the MCQ form.

NAME_____
Student ID_____
Have you previously studied Economics (e.g., Leaving Cert, A Level)?_____

Materials Permitted for this Examination
Non-programmable calculator;
Graph Paper

You may not start this examination until you are instructed to do so by the Invigilator.

Section A

1. If the CPI is growing at a rate of 7 percent, then:

    A) The CPI will double in around 10 years
    B) The real wage will double in around 10 years
    C) Inflation will double in around 10 years
    D) The economy is experiencing disinflation
    E) The quantity theory of money indicates the money supply is falling

2. Some economists argue that the *Protestant work ethic* was an important factor leading to a rise in output during the Industrial Revolution. In the production function one could represent this as

    A) Longer labour hours, so L would rise
    B) A rise in the exponent on labour i.e., a rise in $1-\alpha$
    C) A fall in K
    D) A rise in total factor productivity
    E) Both A) and D)

3. Suppose an alien comes down from Mars and threatens to halve EITHER i) the depreciation rate OR ii) the level of total factor productivity OR iii) the savings rate. If you only cared about output growth immediately after the change, then

    A) You would choose i; all other options yield lower output growth
    B) You would choose ii; all other options yield lower output growth
    C) You could choose iii; all other options yield lower output growth
    D) You could choose either i or ii; it makes no difference
    E) You would choose either ii or iii; it makes no difference

4. If the rate of return (or interest rate) falls, then the bond price must

    A) Rise
    B) Fall
    C) Double
    D) Stay the same
    E) Stay the same according to the efficient markets hypothesis

5. Suppose there are two economies, A and B, at steady state. A has a *higher* rate of of depreciation and *lower* level of TFP than B. Yet if the standard of living in A is *higher*, then

    A) GDP per capita is lower in A
    B) GDP per capita is higher in B
    C) The savings rate must be higher in A
    D) The savings rate must be higher in B
    E) A is experiencing conditional convergence

6. If output is rising, while labour supply and the capital stock are falling, then *growth accounting* would reveal that

    A) The capital stock and labour supply are falling at different rates
    B) The capital stock and labour supply are falling at the same rate
    C) Total factor productivity is constant
    D) Total factor productivity is falling
    E) Total factor productivity is rising

7. Suppose there are two economies, A and B, with the same steady states. If A is growing faster than B, then

    A) A currently has a lower standard of living
    B) B currently has a lower standard of living
    C) We cannot compare current standards of living in A and B
    D) The standards of living in both countries are equal
    E) Money growth is faster in A.

8. The *Fisher effect* refers to the fact that

    A) Because of inflation, real interest rates are lower in high inflation economies
    B) Because of inflation, nominal interest rates are higher in high inflation economies
    C) Because of the greater associated risk, nominal interest rates are higher for bonds with greater default rates
    D) Because of greater risk, long-run bonds pay higher interest rates than short-run bonds
    E) Nominal interest rates are more variable

9. If real GDP is rising, but nominal GDP is falling, then the economy is experiencing

    A) Hyperinflation
    B) Inflation
    C) Disinflation
    D) Price stability (i.e., an unchanging CPI)
    E) Deflation

10. According to the *permanent income hypothesis*, if everyone in the economy expects a large increase in living standards in the future, then

    A) GDP per capita will rise in the future
    B) Growth accounting would reveal greater future TFP growth
    C) The level of savings will fall in the economy today
    D) The level of savings in the economy will fall in the future
    E) The level of consumption will fall in the economy today

11. The model that has proved wrong as a description of the long-run economic development is

    A) The Malthusian Model
    B) The New Growth Theory
    C) The Solow Model
    D) The classical dichotomy
    E) The theory of conditional convergence

12. If the current account is positive, then

    A) Net exports are negative
    B) GNP is falling
    C) International savings are positive
    D) International savings are negative
    E) International savings are zero

13. If the current account deficit is 32, private savings are 2, and the government deficit is 20. Then the level of investment is

    A) 32
    B) 54
    C) 34
    D) Indeterminate
    E) 14

14. According to the *permanent income hypothesis*, if you make large losses on the stockmarket, causing your lifetime wealth to fall, then, ceteris paribus,

    A) Your consumption should fall this year only
    B) Your consumption should fall each year for the rest of your life
    C) Your consumption should fall this year, but rise next year
    D) Your consumption should fall this year and next year ONLY
    E) Your consumption level wouldn't change this year, but would fall in the future.

Section B

1. a)

   i) Suppose that when the capital stock is below a certain level, K', the savings rate is zero. But when it is above that level, the savings rate is s. Using a Solow diagram, illustrate this situation graphically.

   ii) Explain briefly what happens to the standard of living if the economy starts with a level of capital below K'. In particular, what happens to the level of *consumption* if the economy starts below K'?

   b)

   i) Figure 1 shows that the investment rate rose in both the U.S. and South Korea over the period 1960-1995. What does the Solow model predict about output growth in South Korea in these years?

   ii) If the U.S. started off poorer that South Korea in 1960, can we say in which country output growth was fastest over this period? (Assume nothing else changed in these economies over this time.)

2. a) *Suppose investment demand rises in an economy. At the same time, savers become less sensitive to changes in interest rates.*

   i) Using the loanable funds model, illustrate these changes graphically.

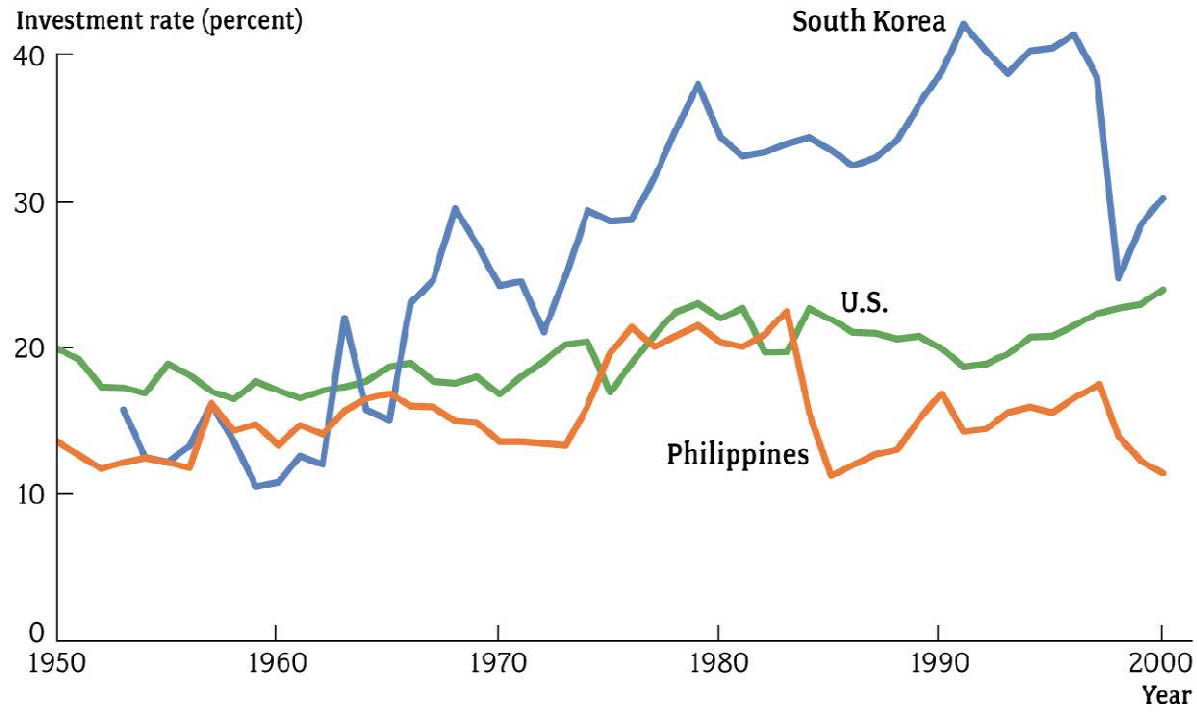
   ii) Explain clearly the economic implications of the new savings behaviour.

   b)

   i) Suppose a central bank wishes to maintain a *constant price level*, P. Suppose now the economy is *always* at potential output, and the velocity of money suddenly *falls*. Use the *equation of exchange* to determine what the central bank must do with the money supply.

   ii) Suppose the required *real* rate of return is 4 percent. In an economy, money growth is always 5 percent, while output growth is always 3 percent. Using the *quantity theory of money*, determine the 1) inflation rate and 2) the *nominal* interest rate in this economy.

FIGURE 1


Investment rate (percent)
40
30
20
10
0
South Korea
U.S.
Philippines
1950
1960
1970
1980
1990
2000
Year