FAKULTI EKONOMI DAN PENGURUSAN

Semester Pertama 2014/2015

MAKROEKONOMI

ECN 3102

TUGASAN 1 (ASSIGNMENT 1)

Pensyarah: EN. MOHD NASEEM NIAZ AHMAD

Arahan: Jawab semua soalan.


Tarikh hantar: Pada 7 OKTOBER 2014 (SELASA)

Kaedah Pengahantaran Jawapan: MELALUI EMAIL: naseemniaz@upm.edu.my

Markah bagi tugasan 1 merangkumi sebanyak 15 peratus.

Mohon maklumkan saya melalui email sebagai akuan penerimaan tugasan 1 ini.
1) Compare and contrast the classical and Keynesian schools of thought for the following economic issues.
(a) The flexibility of wages and prices. (2 marks)
(b) The importance of macroeconomic policies. (2 marks)

2) Suppose the marginal product of labor in the economy is given by \( MPN = 200 - 0.5 N \), while the supply of labor is \( 100 + 4w \).
(a) Find the market-clearing real wage rate. (2 marks)
(b) What happens if the government imposes a minimum wage of 40? Is there involuntary unemployment? (2 marks)
(c) What happens if the government imposes a minimum wage of 60? Is there involuntary unemployment? (2 marks)

3) In each of the following scenarios, state whether the labor supply curve would shift to the left, to the right, not shift at all, or if the shift is ambiguous because there is more than one effect and they would move the curve in opposite directions.
(a) The stock market rises sharply. (1 mark)
(b) Fewer teenagers work while in school than before. (1 mark)
(c) A large fraction of the population flees the country because of a bird flu epidemic. (1 mark)
(d) The expected future wage declines and the stock market crashes. (1 mark)
(e) The current real wage rate rises. (1 mark)

4) In a given year, a country’s GDP = $3843, net factor payments from abroad = $191, taxes = $893, transfers received from the government = $422, interest payments on the government’s debt = $366, consumption = $3661, and government purchases = $338. Calculate the values of private saving, government saving, and national saving. (5 marks)

5) A firm has current and future marginal productivity of capital given by \( MPK = 10000 - 2K + N \), and marginal productivity of labor given by \( MPN = 50 - 2N + K \). The price of capital is $5000, the real interest rate is 10%, and capital depreciates at a 15% rate. The real wage rate is $15.
(a) Calculate the user cost of capital. (2 marks)
(b) Find the firm’s optimal amount of employment and the size of the capital stock. (2 marks)

6) An economy has full-employment output of 5000. Government purchases are 1000. Desired consumption and desired investment are given by
\[
C^d = 3000 - 2000r + 0.10Y \\
I^d = 1000 - 4000r
\]
where \( Y \) is output and \( r \) is the expected real interest rate.
(a) Find the real interest rate that clears the goods market. Assume that output equals full-employment output. (2 marks)
(b) Calculate the amount of saving, investment, and consumption in equilibrium. (2 mark)
(c) If a shock to wealth causes desired consumption to decline by 200 (so that the new equation for desired consumption is \( C^d = 2800 - 2000r + 0.10Y \)), find the equilibrium real interest rate, saving, investment, and consumption. (2 mark)
7) What happens to real money demand (rise, fall, no change) due to a change in each of the following factors?
   (a) A tax on stock market transactions is introduced. (1 mark)
   (b) Computerized bond trading reduces transactions costs. (1 mark)
   (c) People’s average level of wealth rises. (1 mark)
   (d) The threat of a recession increases the riskiness of stocks and bonds. (1 mark)
   (e) The interest rate paid on checking account balances declines. (1 mark)
   (f) The price level falls in a one-time jump. (1 mark)

8) Suppose the money demand function is given by
   \[ \frac{M_d}{P} = 640 + 0.1Y - 5000 (r + \pi). \]
   Suppose the central bank changes the nominal money supply depending on income and inflation:
   \[ M^\theta = 1000 + 0.1Y - 4000\pi. \]
   (a) If expected inflation equals actual inflation = 0.03, \( Y = 1000 \), and \( r = 0.02 \), calculate the price level. (2 marks)
   (b) If inflation rises to 0.04 while the other variables remain as in part a, calculate the price level. (2 marks)
   (c) If expected inflation rises to 0.04 while the other variables remain as in part a, calculate the price level. (2 marks)
   (d) If the real interest rate rises to 0.03 while the other variables remain as in part a, calculate the price level. (2 marks)

9) Suppose the Okun’s law coefficient is 2, the full-employment level of output is $5000 billion, and the natural rate of unemployment is 6%.
   (a) What is the current level of output if the current unemployment rate is 8%? (2 marks)
   (b) Suppose the unemployment rate falls to 5%; what is the current level of output? (2 marks)
   (c) Suppose structural changes in the economy raise the natural rate of unemployment to 7%, and lower the full-employment level of output to $4800 billion. If the current unemployment rate is 8%, what is the current level of output? (2 marks)