S6 Economics Practice Paper (Macroeconomics): GDP by the Expenditure Approach and GDP per Capita, Nominal and Real Growth, CPI and Inflation Rate, Unemployment Rate and Labour Force Participation, Deposit Creation and the Money Multiplier, Fiscal Multipliers and the Balanced Budget, Trade Balance and Current Account, Currency Depreciation and Purchasing Power Parity

S6 Economics | 100 marks | 75 minutes

Section 1: Gross Domestic Product and Economic Growth (18 marks)

Study the table below and answer the questions. All figures are in HK$ billion.

In an economy, private consumption is 18,500, gross domestic fixed capital formation is 6,200, government consumption expenditure is 3,200, exports of goods and services are 31,000 and imports are 29,000. Calculate GDP by the expenditure approach. *(5 marks)*

The population is 7.5 million. Calculate GDP per capita in HK dollars. *(4 marks)*

Net factor income from abroad is -1,800. Find GNI and explain why it is lower than GDP. *(5 marks)*

If nominal GDP in year 2 is 32,900 and the price index is 108, find real GDP and the real growth rate, and explain the difference between nominal and real growth. *(4 marks)*

Section 2: Consumer Price Index and Inflation (17 marks)

The CPI of an economy is based on a basket of goods; the base year index is 100.

Basket weights: food 30%, housing 40%, transport 15%, others 15%; this year the category indices are 130, 112, 118 and 105. Calculate the CPI. *(5 marks)*

Last year the index was 112.5. Calculate the inflation rate. *(4 marks)*

Nominal wages rise by 6%. What is the change in real wages? Explain. *(4 marks)*

Why may the CPI overstate the rise in the cost of living? Give two reasons. *(4 marks)*

Section 3: Unemployment and the Labour Force (16 marks)

In an economy the population aged 15 and over is 6.5 million, the labour force is 3.9 million, employment is 3.73 million and the underemployed number 62,000.

Calculate the number of unemployed and the unemployment rate. *(4 marks)*

Calculate the underemployment rate. *(4 marks)*

Calculate the labour force participation rate and explain its relationship with the unemployment rate. *(4 marks)*

Give one example each of demand-deficient (cyclical) unemployment and structural unemployment, with one policy for each. *(4 marks)*

Section 4: Deposit Creation and Money Supply (17 marks)

The required reserve ratio is 20%. The public deposits HK$50 billion in cash and banks hold no excess reserves.

Calculate the deposit multiplier and the maximum total deposits the banking system can create. *(5 marks)*

Calculate the newly created deposits, i.e. the increase in money supply. *(4 marks)*

If the required reserve ratio falls to 12.5%, how do the multiplier and maximum deposits change? *(4 marks)*

If the public holds 30 billion in cash and 90 billion in demand deposits, find M1 and explain how cash leakage affects deposit creation. *(4 marks)*

Section 5: Fiscal Policy and Multipliers (16 marks)

An economy has income of HK$600 billion, a tax rate of 16.5%, government expenditure of HK$105 billion and a marginal propensity to consume of 0.8.

Calculate tax revenue and the fiscal balance (surplus or deficit). *(4 marks)*

Calculate the government spending multiplier and the tax multiplier. *(4 marks)*

Government spending rises by 10 billion. What is the change in GDP? What if taxes are cut by 10 billion instead? *(4 marks)*

If the government raises spending by 10 billion and taxes by 10 billion at the same time, find the balanced budget multiplier and the change in GDP. *(4 marks)*

Section 6: Trade Balance, Current Account and Exchange Rate (16 marks)

An economy has goods exports of 420 billion, goods imports of 450 billion, services exports of 70 billion, services imports of 45 billion and net factor income of 12 billion (all in HK dollars).

Calculate the visible trade balance and the invisible trade balance. *(4 marks)*

Calculate the overall trade balance and the current account balance. *(4 marks)*

If US$1 = HK$7.80 and the dollar depreciates 5%, find the new rate and the HK$ price of a US$100 export good. *(4 marks)*

The same basket costs HK$780 in Hong Kong and US$100 in the US. Find the PPP exchange rate and explain its relation to the market rate. *(4 marks)*