

UNIVERSITY OF COLOMBO, SRI LANKA  
FACULTY OF ARTS

SECOND YEAR EXAMINATION IN ARTS (ECONOMICS) – 2017

ECN 2115 - MACROECONOMICS

Time Allowed: Two (02) Hours

Answer 03 questions, including question (1).

Whenever necessary use rough sketches of graphs to illustrate your answers.

Calculators can be used.

Marks: 50 for question (1) and, 25 for each of the other questions.

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(1) Answer any 5 of the following questions:

- i. “Output determines demand or demand determines output”. Briefly explain the background of this basic macroeconomic controversy.
- ii. In an economy with a lump-sum tax system ( $T_0$ ), if consumption function is given as  $C = [C_0 - cT_0] + cY$ , then show that the saving function is  $S = -[C_0 + (1 - c)T_0] + (1 - c)Y$ .
- iii. “An increase in tax rate will make the IS line steeper”. Explain whether this is true or false, by *deriving* the IS equation of a closed economy.
- iv. “An increase in interest rate will make some of the investment projects unprofitable; therefore the level of investment in the economy tends to fall”. Do you agree? Explain.
- v. During the first half of 2017, the Central Bank of Sri Lanka has attempted to maintain the same prevailing interest rates and the same statutory reserve ratio of the commercial banks. Explain briefly the objectives of this policy stance of the Central Bank.
- vi. Japan has been experiencing near-zero interest rates in its bond market. What does this mean for the price of bonds in Japan? Explain.
- vii. “Government spending and private investment both will have a positive impact on economic growth. However, increased government spending will always reduce private investment”. Explain whether you agree or not.
- viii. “In an inflationary situation, a country is likely to experience an increase in its trade deficit”. Do you agree? Explain.

(10 marks for each)

(2) Following information represent a closed economy with government:

Consumption function	$C = 100 + 0.80Y_d$
Investment Expenditure	$I = 180$
Government Expenditure	$G = 100$
Exports	$X = 200$
Imports function	$M = 0.2Y$
Tax	$T = 100$

While  $Y$  and  $Y_d$  are total income and disposable income, respectively, all values are in LKR millions.

Answer the following questions.

- (i) Find the equilibrium level of national income. What is the value of the expenditure multiplier? What does the multiplier mean?
- (ii) Find the value of savings ( $S$ ) and imports ( $M$ ) at equilibrium income level and, show that  $S + T + M = I + G + X$
- (iii) With the view of improving trade balance with import controls, the government changed the imports function as  $M = 0.05Y$ ; calculate the new equilibrium income and trade balance
- (iv) Show your results on a sketch of graph
- (v) If the reduction in imports affects all other variables in AD, will the economy have improved its equilibrium income level?

(5 marks for each)

(3) An increase in government spending will raise the output level of the economy, but at the same time it will push the interest rates up. Answer the following questions:

- i. Explain how an increase in government spending leads to higher output and interest rates, using IS-LM framework of a closed economy.

(10 marks)

- ii. In response to the increase in government spending, if the price level also starts rising, the positive impact on output will be lower. Do you agree? Explain.

(15 marks)

- (4) Stock of money in an economy should be increased in line with economic growth, because otherwise interest rates tend to rise. Therefore, it is the responsibility of the Central Bank to monitor and maintain growth of the money stock.
- i. Explain how and why interest rate responds to an increase in output level, assuming money supply remains the same.  
(15 marks)
  - ii. Explain the impact of following events on the interest rates of an economy:
    - a) Government increases borrowings from the Central Bank
    - b) Increase in price level due to drought condition in the country(10 marks)
- (5) In an economy with no capital mobility, the government keeps increasing its spending to accelerate economic growth. However, it was found that the same policy has led to a deterioration of the balance of payments of the country. Answer the following questions:
- i. In an IS-LM-BOP framework, show the impact of the increase in government spending on internal equilibrium and balance of payments of this country and explain.  
(10 marks)
  - ii. As a result, exchange rate was under pressure but the Central Bank was not willing to let it depreciate. Explain the policy option of the Central Bank to achieve balance of payment equilibrium while maintaining a stable exchange rate. How does it affect the government's policy objective?  
(15 marks)

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