

Semester “Spring 2011”

“Macroeconomics (ECO403)”

Assignment No.02

Marks: 15

Question 01:

Assume that the following data taken from the economy of Pakistan.

$$C = 400 + 0.7(Y-T)$$

$$G = 200$$

$$T = 70$$

$$I = 100$$

Calculate the equilibrium level of output.
(Write down all relevant steps)

Marks: (8)

Question 02:

The marginal propensity to consume (MPC) of the economy of Pakistan is 0.77.

- a) What is the Government-spending multiplier?
- b) What is the Tax multiplier?

(Write down all relevant steps)

Marks: (3.5+3.5)

Solution:

Question -01

The equilibrium is calculated by solving the following equation for output:

$$Y = C(Y-T) + I + G$$

Now putting the value of C, G and I

$$Y = 400 + 0.7*(Y-70) + 100 + 200$$

$$Y = 700 + 0.7Y - (0.7)(70)$$

$$Y = 700 + 0.7Y - 49$$

$$Y = 700 - 49 + 0.7Y$$

$$Y - 0.7Y = 651$$

$$Y = 651 / (1-0.7)$$

$$Y = 2170$$

Question -2

Part a:

$$K = 1/1-MPC$$

$$K = 1/1 - 0.77$$

$$K = 1/0.23$$

$$K = 4.34$$

Part b:

$$K = -MPC / 1-MPC$$

$$K = - 0.77/1-0.77$$

$$K = - 0.77/0.23$$

$$K = - 3.34$$