## THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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## MAIN EXAMINATION

## AUGUST - DECEMBER 2016 TRIMESTER FACULTY OF ARTS AND SOCIAL SCIENCES DEPARTMENT OF SOCIAL SCIENCES

## **REGULAR PROGRAMME**

**SEC 312: ADVANCED MACROECONOMICS** 

Date: DECEMBER 2016 Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and ANY other TWO Questions

- Q1. a) When and where did modern economic growth first happen? (2 Marks)
  - i. What are the major institutional factors that form the foundation for modern economic growth? (5 Marks)
  - ii. What do they have in common? (2 Marks)
  - b) The Solow growth model is the starting point to determine why growth differs across similar countries. As per the Solow growth model answer the following questions:
    - i How does capital accumulation over time, help us to understand economic growth? (5 Marks)
    - ii What is the role of the diminishing marginal product of capital in explaining differences in growth rates across countries?

(5 Marks)

iii. The principle of transition dynamics: the farther below its steady state a country is, the faster the country will grow. Explain.

(6 Marks)

- iv. What are the know strengths and weakness of the Solow model of economic growth? (5 Marks)
- Q2. a) Use the following data to calculate:
  - i. the size of the labor force?

(2 Marks)

- the official unemployment rate: total population, 500; population under 16 years of age or institutionalized, 120; not in labor force, 150; unemployed, 23; part-time workers looking for full-time jobs, 10.
   (4 Marks)
- b) Assume that in a particular year the natural rate of unemployment is 5 percent and the actual rate of unemployment is 9 percent.
  - i What is the size of the GDP gap in percentage-point terms?

(4Marks)

ii If the nominal GDP is \$500 billion in that year, how much output is being foregone because of cyclical unemployment?

(3 Marks)

- c) Explain how an increase in your nominal income and a decrease in your real income might occur simultaneously.
  - v. Who loses from inflation?

(2 Marks)

vi. Who loses from unemployment?

(2 Marks)

vii. If you had to choose between (a) full employment with a 6 percent annual rate of inflation or (b) price stability with an 8 percent unemployment rate, which would you choose? Why?

(3 Marks)

- Q3. a) Explain graphically the determination of the equilibrium GDP (Y) for a private losed economy; and give the reason why the intersection of aggregate expenditures schedule and the 45-degree line determines the equilibrium GDP (Y). (8 Marks)
  - b) Assume that the linear equation for consumption in a hypothetical private closed economy is C = 10 + 0.9Y, where Y is total real income (output).

Also suppose that the equation for investment is Ig = Ig0 = 40, meaning that Ig is 40 at all levels of real income (output). Using the equation Y = C + Ig, determine the equilibrium level of Y. What are the total amounts of consumption, saving, and investment at equilibrium Y? (12 Marks)

Q4. a) In deriving the Aggregate Demand, income is not held constant along the AD curve. What are the three things are held constant? Discuss.

(6 Marks)

- b) Input prices affect output prices, but not necessarily immediately; the important channels by which input prices and output prices are linked are? Explain. (7 Marks)
- c) Some of the reasons why expected input prices do not adjust immediately to changes in output prices are? List and discuss at least four reasons.

  (7 Marks)
- Q5. "Planned investment is equal to saving at all levels of GDP; actual investment equals saving only at the equilibrium GDP."
  - a.) Do you agree? Explain.

(10 Marks)

b.) Critically evaluate: "The fact that households may save more than businesses want to invest is of no consequence, because events will in time force households and businesses to save and invest at the same rates."

(10 Marks)

(10 Marks)

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