1 True, False or Uncertain

Answer each of the following questions either true, false, or uncertain and explain your answer. The explanation is the most important part of your answer.

Note: The first section of the exam will consist of several “true, false, or uncertain” questions. These are short answer questions where you must explain why a statement is either true or false, or alternatively explain why the statement may be either true or false, depending on the circumstances. For some of these questions, you will need to draw a graph and explain the graph.

1. If money demand is insensitive to changes in income, then fiscal policy is relatively strong.

2. Expansionary fiscal policy increases income and decreases interest rates.
3. An increase in planned investment ($I_p$) causes interest rates to fall and real GDP to rise.

4. According to the model of income determination in chapter 3, the government spending multiplier is smaller when new exports are endogenous and larger when new exports are exogenous.

5. A cattle farmer sells three things: (1) fattened young cows to slaughter houses, (2) young bulls to other cattle farmers, and (3) cow manure to home gardeners. All three of these types of transactions are included in GDP.
6. According to the model of income determination in Chapter 3, an increase in Net Export expenditure decreases real GDP.

7. Suppose that I sell all my old economics textbooks on e-Bay. This transaction is counted as part of GDP in the National Income and Product Accounts.

8. According to the model of income determination in Chapter 3, a $100 billion increase in Government spending and a simultaneous $100 billion increase in tax revenues will have no effect on real GDP.
2 Analysis

Answer the following questions in the space provided.

Note: The second section of the exam will consist of several “analysis” questions. These are longer, perhaps multiple part questions where you must apply or explain a model we covered in class to some situation. For most of these questions, you will need to draw graphs and explain the graphs; you may also need to explain or manipulate the equations that make up the models to answer these questions.

6. This question focuses on the IS-LM model developed in chapters 3-5 in the textbook. Answer each question based on this model.

6.a Which variables in the IS-LM model are exogenous and which are endogenous? Explain what exogenous and endogenous mean in the context of the IS-LM model in terms that a person who has never taken an economics class would understand.

6.b Graphically or algebraically solve the IS-LM model. Clearly label the equilibrium point in the model and the equilibrium value of the endogenous variables.

6.c In class, we discussed the idea that the equilibrium in the IS-LM model is stable. Explain why this equilibrium is stable.
6.d Explain the expected effects of the proposed increase in the level of government spending currently being debated by the congress on the economy in terms of the IS-LM model.


7.a On the axes below, sketch the time path of real GDP and real natural GDP from March 1991 until the present. Label the axes and all components of your graph.

7.b Define real natural GDP in terms that someone who has never taken an economics class could understand. Discuss the factors that determine the size and growth of this variable.
7.c Discuss the behavior of the GDP ratio (the ratio of real GDP to real natural GDP $\frac{Y}{YN}$) over this period.

7.d Based on the behavior of $\frac{Y}{YN}$ described above, discuss what should have happened to the unemployment rate and the inflation rate over the period March 1991 until the present.

8. Assume that the following equations summarize the structure of an economy

$$C = C_a + 0.75(Y - T) \quad G = 1,200$$
$$C_a = 800 - 25r \quad NX = 200 - 0.1Y$$
$$T = 400 + 0.2Y \quad \left(\frac{M}{P}\right)^d = 0.2Y - 20r$$
$$I_p = 600 - 25r \quad \frac{M^s}{P} = 600$$

8.a What is the equation of the IS curve?

8.b What is the equation of the LM curve?

8.c What is the equilibrium interest rate and level of real output?

8.d If $G$ increases to 1,400, what is the new equilibrium interest rate and level of real output?

8.e If $G$ remains at 1,200, but $M^s/P$ increases to 800 what is the new equilibrium interest rate and level of real output?
General Comments and Exam Tips

- You will be provided with an equation sheet for the exam. This equation sheet will contain every numbered equation in the textbook. A sample copy of this equation sheet is available on the class web page.

- The primary focus of the exam is understanding how the models work and being able to apply the models to analyze economic policy options. There will be few questions on the exam that can be answered by memorizing definitions and regurgitating these definitions. You should spend most of your preparation time using the models covered in class as economic analysis tools.

- Working the problems at the end of the chapters in the text will also help you to prepare for the exam.