UNIVERSITY OF NEW HAMPSHIRE
Department of Economics

Exam 1
Econ 611
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This exam is worth 20% of your final grade. It consists of three parts. Part A, worth 20 points, asks you to define as precisely and concisely as possible five terms. Part B, worth 50 points, consists of 25 multiple-choice questions. You are asked to pick the best answer. Part C, worth 30 points, involves answering three short-answer questions as precisely and succinctly as possible.

Note 1: You are not penalized for incorrect answers in Part B, so please attempt all questions.

Note 2: Place your answers on this exam for parts A and C. Note, you are provided with a limited amount of space in which to write your answer. Write only in the spaces provided. Parts of answers not found in their intended spaces will not be read.

Note 3: When in doubt draw a graph!

Note 4: Good Luck!

PART A: Definitions (25 points)

Define as precisely and concisely as possible the following 5 terms.

1. A CPI = 158 (base year = 100)

2. Explain Briefly the Difference Between the GDP Deflator and the RGDP

3. The Fundamental Idea
4. Money Demand

5. The Expenditure Function

Do not write below this line
1. When nominal GDP increases during a given year, it is always true that
   a. real output and the price level (GDP deflator) have both increased.
   b. either real output or the price level (GDP deflator) have increased.
   c. real output has increased.
   d. real output has decreased and the price level has increased.
   e. the price level (GDP deflator) has increased.

2. In a given month in the United States, 100 million people are working,
   10 million are not working but are looking for work, and 20 million
   are not working and have given up looking for work. The official
   unemployment rate is
   a. 7.7%
   b. 30%
   c. 9.1%
   d. 10%
   e. 23%

3. In the short run, changes in GDP are caused mostly by changes in:
   a. supply.
   b. political ideology.
   c. demand.
   d. technology.
   e. population.

4. In the long run, changes in GDP are caused mostly by changes in:
   a. monetary policy
   b. demand
   c. supply factors (e.g. technology)
   d. all of the above
   e. none of the above

5. In the United States, labor income accounts for approximately what
   share of GDP?
   a. 33%
   b. 40%
   c. 65%
   d. 50%

6. Suppose nominal GDP in 1999 increased by 7% (over its previous level
   in 1998). Given this information, we know with certainty that:
   a. more information is needed to answer this question
   b. real GDP increased during 1999
   c. both the GDP deflator and real GDP increased during 1999
   d. the GDP deflator increased during 1999
7. "Government spending" in GDP consists of spending by
   a. the federal government only.
   b. state and local governments only.
   c. the federal government, plus state and local spending only if it is
      paid for with federal government funds.
   d. the federal and state governments only.
   e. all levels of government: federal, state, and local.

8. Which of the following is an exogenous variable in our model of the
   goods market?
   a. consumption (C)
   b. saving (S)
   c. disposable income (Yp)
   d. government spending (G)
   e. all of the above.

9. The marginal propensity to consume is
   a. total income minus total taxes.
   b. the increase in disposable income caused by a one-unit decrease in
      taxes.
   c. total consumption spending divided by total disposable income.
   d. the value of consumption spending if income were zero.
   e. the increase in consumption caused by a one-unit increase in
      disposable income.

The question below (marked with ^) refer to the following behavioral
equations for an economy:
C = 1,000 + .75Yp
I = 500
G = 2,000
T = 1,000

10. Equilibrium output in this economy is
    a. 2,500.
    b. 4,500.
    c. 10,000.
    d. 11,000.
    e. none of the above.

11. The multiplier in this economy is
    a. 2.
    b. 3.
    c. 4.
    d. 5.
    e. none of the above.
12. The exogenous variables in this model are:
   a. T, G, and I.
   b. T only.
   c. G and T.
   d. I only.
   e. G only.

13. Based on our understanding of the model presented in Chapter 3, we
    know with certainty that an increase in the marginal propensity to
    consume will cause:
    a. the ZZ line to become steeper and a given change in government
       spending (G) to have a larger effect on output
    b. the ZZ line to become flatter and a given change in government
       spending (G) to have a larger effect on output
    c. the ZZ line to become flatter and a given change in government
       spending (G) to have a smaller effect on output
    d. the ZZ line to become steeper and a given change in government
       spending (G) to have a smaller effect on output

14. Based on our understanding of the model presented in Chapter 3, we
    know with certainty that an equal and simultaneous increase in G and T
    will cause:
    a. an increase in output
    b. an increase in investment
    c. no change in output
    d. a reduction in output

15. Which of the following would shift the demand for money curve
    leftward?
    a. a drop in income.
    b. a rise in the interest rate.
    c. an increase in the money supply.
    d. all of the above.
    e. none of the above.

16. Which of the following are a component of M1?
    a. bonds.
    b. checkable deposits.
    c. money market funds.
    d. all of the above.
    e. none of the above.

17. If a bond offering to pay $200 in one year is to have a 20% interest
    rate, then its price must be:
    a. $180.
    b. $140.
    c. $83.33.
    d. $160.
    e. $166.66.
18. In an expansionary open market operation, the central bank
   a. sells bonds, but causes no change in the interest rate.
   b. buys bonds, causing the interest rate to fall.
   c. sells bonds, causing the interest rate to rise.
   d. buys bonds, causing the interest rate to rise.
   e. sells bonds, causing the interest rate to fall.

19. The federal funds rate is determined in which of the following markets?
   a. the money market
   b. the market for reserves
   c. the bond market
   d. the market for central bank money

20. Which of the following will shift the IS curve?
   a. a change in government spending.
   b. a change in taxes.
   c. a change in consumer confidence.
   d. all of the above.
   e. none of the above.

21. If the central bank buys government bonds,
   a. the LM curve shifts rightward.
   b. the LM curve shifts leftward.
   c. the IS curve shifts rightward.
   d. the IS curve shifts leftward.
   e. the IS curve shifts rightward; the LM curve may or may not shift
      depending on what happens to the interest rate.

22. A fiscal expansion coupled with a monetary contraction must always cause
   a. output to rise.
   b. the interest rate to fall.
   c. output to fall.
   d. both output and the interest rate to rise.
   e. the interest rate to rise.

23. Suppose we observe a policy mix of expansionary monetary policy and
    expansionary fiscal policy. Based on this information, we know with
certainty that this combination of policies will cause:
   a. a reduction in i
   b. a reduction in Y
   c. an increase in Y
   d. an increase in i
24. In Figure 8-1, at 2000 billion real GDP,

a. inventories are rising.
b. spending exceeds total output and inventories will fall.
c. aggregate demand equals aggregate supply.
d. spending falls short of output and firms will reduce production.

25. In the above figure, if firms produced at point B, then there would be an inventory accumulation of

a. CD
b. AB
c. FC
d. FD
3.0 Short-Answer Questions (30 points)

Answer the following short-answer questions as succinctly and precisely as you can. Use only the spaces provided.

1. Suppose the economy is characterized by the following behavioral equations:

   \[ C = 200 + 0.9Y_d \]
   \[ I = 100 + 0.05Y \]
   \[ G = 150 \]
   \[ T = 100 \]

   a. Derive the IS equation. What does this equation say?

   b. Derive the LM curve. What does this equation say?

   c. If GDP were 2226.67, then what would be the equilibrium level of interest rates? Would the goods market be in equilibrium at these levels of GDP and i? Draw the IS-LM diagram and show where this economy is located in the diagram given these levels of GDP and i. Label this point A in the diagram. Explain the economic logic behind how the economy moves from point A in the diagram to a point where both the goods market and financial markets are both in equilibrium.
2. What has happened to short-run interests in the U.S. over the past year? Use the bond market-money market story to explain how the Fed contributed to this movement. Be sure to label all axes and curves and be precise about how the Fed conducted its policy. Also be sure to explain precisely why interest rates move in the way they do in your diagram. (Hint: you need to talk about what happens to bond prices.)
3. What is private domestic investment? Using the chart on the next page, what happened to I in the U.S. starting in the year 2000? Based on the IS-LM model, what would you expect to happen to U.S. GDP and short-run interest rates in the year 2001? Show this in the diagram and explain the economic logic behind any shifts in the curves and why Y and i move the way they do. What did happen to Y and i in 2001?