Midterm 2 - Economics 101B (Spring 2015)
You will have 45 minutes to complete this exam. There are 45 points.
Write all 26 multiple choice answers on your scantron.

Multiple Choice: (20 points total, 1 point each) Choose the best answer. Write on your scantron.

1. An explanation for the slope of the \( LM \) curve is that as:
   A) income rises, money demand rises, and a lower interest rate is required.
   B) the interest rate increases, income becomes higher.
   C) the interest rate increases, income becomes lower.
   D) income rises, money demand rises, and a higher interest rate is required.

2. According to the quantity theory and the Fisher equation, if the money growth increases by 4 percent (with constant velocity and income) and the real interest rate equals 3 percent, then the nominal interest rate will increase:
   A) 4 percent.
   B) 1 percent.
   C) 7 percent.
   D) 3 percent.

3. Based on the Keynesian model, one reason to support government spending increases over tax cuts as measures to increase output is that:
   A) government-spending increases do not lead to unplanned changes in inventories, but tax cuts do.
   B) government spending increases the \( MPC \) more than tax cuts.
   C) increases in government spending increase planned spending, but tax cuts reduce planned spending.
   D) the government-spending multiplier is larger than the tax multiplier.

4. The \( LM \) curve is steeper the _____ the interest sensitivity of money demand and the _____ the effect of income on money demand.
   A) smaller; smaller
   B) smaller; greater
   C) greater; smaller
   D) greater; greater

5. If the ratio of reserves to deposits \( (rr) \) increases, while the ratio of currency to deposits \( (cr) \) is constant and the monetary base \( (B) \) is constant, then:
   A) the money supply increases.
   B) the money supply does not change.
   C) it cannot be determined whether the money supply increases or decreases.
   D) the money supply decreases.

6. Other things equal, a given change in money supply has a larger effect on demand the:
   A) steeper the \( IS \) curve.
   B) smaller the interest sensitivity of expenditure demand.
   C) larger the income sensitivity of money demand.
   D) flatter the \( IS \) curve.
7. According to the classical dichotomy, when the money supply decreases, ____ will decrease.
   A) consumption spending
   B) the price level
   C) investment spending
   D) real GDP

8. Equilibrium in the market for goods and services determines the _____ interest rate and the expected rate of inflation determines the _____ interest rate.
   A) ex ante nominal; ex post real
   B) ex ante real; ex ante nominal
   C) ex post nominal; ex post real
   D) ex post real; ex post nominal

9. An explanation for the slope of the IS curve is that as the interest rate increases, the quantity of investment _____, and this shifts the expenditure function _____, thereby decreasing income.
   A) decreases; upward
   B) decreases; downward
   C) increases; upward
   D) increases; downward

10. Hyperinflations ultimately are the result of excessive growth rates of the money supply; the underlying motive for the excessive money growth rates is frequently a government's:
    A) responsibility to increase nominal interest rates by increasing expected inflation.
    B) inability to conduct open-market operations.
    C) need to generate revenue to pay for spending.
    D) desire to increase prices throughout the economy.

11. Government policies directed at reducing frictional unemployment include:
    A) raising unemployment insurance benefits.
    B) programs to retrain unemployed workers.
    C) increasing the minimum wage.
    D) all of the above.

12. The IS curve shifts when any of the following economic variables change except:
    A) tax rates.
    B) the interest rate.
    C) the marginal propensity to consume.
    D) government spending.

13. If the money supply increases, then in the IS–LM analysis the _____ curve shifts to the _____.
    A) IS; right
    B) IS; left
    C) LM; left
    D) LM; right
14. In the Keynesian-cross model, fiscal policy has a multiplied effect on income because fiscal policy:
   A) is government spending and, therefore, more powerful than private spending.
   B) changes the interest rate.
   C) changes income, which changes consumption, which further changes income.
   D) increases the amount of money in the economy.

15. Which of the following is the best example of structural unemployment?
   A) Fatima lost her job at a packing plant but has not looked very intensively for a new job because she still has 2 months of unemployment insurance benefits left.
   B) Kirby is seeking a job as an airline pilot, but the high union wages in the industry have limited the number of jobs available.
   C) Tim is looking for a job with flexible hours but has not been offered one yet.
   D) Vickie lost her job as a graphic artist at a movie studio because she did not have training in computer-generated animation.

16. In the long run, according to the quantity theory of money and the classical macroeconomic theory, if velocity is constant, then ______ determines real GDP and ______ determines nominal GDP.
   A) velocity; the money supply
   B) the money supply; velocity
   C) the money supply; the productive capability of the economy
   D) the productive capability of the economy; the money supply

17. Banks create money in:
   A) a fractional-reserve banking system but not in a 100-percent-reserve banking system.
   B) neither a 100-percent-reserve banking system nor a fractional-reserve banking system.
   C) a 100-percent-reserve banking system but not in a fractional-reserve banking system.
   D) both a 100-percent-reserve banking system and a fractional-reserve banking system.

18. If the Fed announces that it will raise the money supply in the future but does not change the money supply today,
   A) both the nominal interest rate and the current price level will increase.
   B) both the nominal interest rate and the current price level will decrease.
   C) the nominal interest rate will increase and the current price level will decrease.
   D) the nominal interest rate will decrease and the current price level will increase.

19. According to the Keynesian-cross analysis, if \( MPC \) stands for marginal propensity to consume, then a rise in taxes of \( \Delta T \) will:
   A) not affect equilibrium income at all.
   B) decrease equilibrium income by \( \Delta T(MPC)/(1 – MPC) \).
   C) decrease equilibrium income by \( \Delta T \).
   D) decrease equilibrium income by \( \Delta T/(1 – MPC) \).

20. John Maynard Keynes wrote that responsibility for low income and high unemployment in economic downturns should be placed on:
   A) inadequate technology.
   B) low aggregate demand.
   C) an untrained labor force.
   D) low levels of capital.
**Problem 1: Short Run and Long Run** (15 points total)

Use the IS-LM / AS-AD model to show the effects of a permanent rise in government spending.

a) (6 points) Draw the IS-LM and AS-AD graphs to show the short run and long run equilibria. Assume that prices are completely fixed in the short run. Be sure to label the axes and curves, use arrows to show shifts in curves, and mark the equilibrium points: 1 for the initial equilibrium, 2 for the short run equilibrium, and 3 for the long-run equilibrium.

(Make the usual IS-LM assumption: Prices are completely fixed in the short run and completely flexible in the long run. Investment is a function only of the interest rate, consumption only a function of disposable income.)

b) (3 points) What happens to the following variables in the short run equilibrium you analyzed above? Write on scantron.

- **MC#21: interest rate:** a) rise  b) fall  c) no change  d) ambiguous
- **MC#22: investment:** a) rise  b) fall  c) no change  d) ambiguous
- **MC#23: consumption:** a) rise  b) fall  c) no change  d) ambiguous

c) (3 points) Compare the long run equilibrium (point 3 on your graph) to the initial level before the shock (point 1 on your graph). For each variable, is the long run value the same as the initial level before the shock, higher than this, lower or ambiguous?

- **MC#24: real GDP:** a) same as initial  b) higher  c) lower  d) ambiguous
- **MC#25: investment:** a) same as initial  b) higher  c) lower  d) ambiguous
- **MC#26: nominal GDP:** a) same as initial  b) higher  c) lower  d) ambiguous
d) (3 pts) In a sentence or two, compare/contrast the long run equilibrium of this IS/LM model to the equilibrium predicted by the Neoclassical model.

**Problem 2: Recessions** (10 points)

There is debate over what shock caused the most recent recession in the U.S. Some say it is best viewed as money demand shocks (a rise in the real money demand for any given interest rate or output level); others say it is best understood as an investment demand shock (fall in the level of investment for any given interest rate).

In several sentences explain what data you would collect on what economic variable(s) to figure out which shocks was the cause -- explain what direction the variable(s) should move and why, and the economic logic for why this distinguishes between the two shocks. (Use complete sentences, no graphs, references to graphs, or math. You may use the logic on which the IS and LM curves are based, but do not refer to the curves directly.)

(Make the usual IS-LM assumptions stated for problem 1 above, including a price level completely fixed in the short run. In addition, assume there is no expected inflation over the relevant horizon, and assume no policy actions taken by the government.)
Space below this line can be used as scratch. It will not be graded.