UNIVERSITY OF FORT HARE
ALICE AND EAST LONDON CAMPUSES

Macroeconomics
ECO 221/E

MAIN EXAMINATION PAPER
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Duration: 180min/3HRS

Subject: ECO 221/E

Marks: 100

This paper consists of 7 pages, including the cover page

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INSTRUCTIONS
Section A is COMPULSORY. Choose FOUR questions from Section B.
Graphs, where applicable, must be clear and well labelled.
Marks will be awarded for relevant examples.
Section A: Compulsory

1. Personal saving
   a. equals national income less personal consumption expenditures.
   b. is personal disposable income minus consumption expenditures.
   c. is the value of stocks and bonds.
   d. equals personal income minus taxes.
   e. is personal disposable income less personal taxes.

2. Potential output
   a. is defined as the level of real output that the economy could produce at high rates of resource utilization.
   b. only occurs when both the unemployment rate and inflation rate are zero.
   c. can be estimated by choosing benchmark measures of high resource utilization.
   d. Both a and c

3. The supply of labor in the classical system is a function of the
   a. marginal product of labor.
   b. real wage.
   c. the public’s preference for leisure.
   d. money wage.
   e. b and c

4. For a given level of the money wage, an increase in the price level will cause the
   a. supply of labor to rise.
   b. quantity of labor demanded to rise.
   c. price of leisure to rise.
   d. quantity of labor demanded to rise.
   e. both b and d

5. If the demand for labor is plotted against the money wage, with the money wage on the vertical axis, then
   a. an increase in the price level will cause the labor demand schedule to shift to the right.
   b. an increase in the money wage will cause the labor demand schedule to shift to the left.
   c. an increase in the money wage will cause the labor demand schedule to shift to the right.
   d. the labor demand schedule will be upward sloping.
6. The classical economists believed that
   a. labor supply is upward sloping because the income effect is greater than the substitution effect.
   b. labor supply is upward sloping because the substitution effect is greater than the income effect.
   c. labor supply is downward sloping because the income effect is greater than the substitution effect.
   d. in equilibrium, the marginal product of labor must exceed the real wage.
   e. both b and d.

7. In the classical model, a rise in the marginal income tax rate would
   a. cause the price level to rise and the level of real output to fall.
   b. cause the price level and the level of real output to both fall.
   c. cause the price level to rise with no effect on real output.
   d. leave both real output and the price level unchanged.

8. In the classical model, an increase in saving is assumed to increase
   a. the demand for loanable funds, which decreases interest rates.
   b. the supply of loanable funds, which decreases interest rates.
   c. both the demand for money and loanable funds, which reduces interest rates.
   d. neither the demand for money nor bonds, leaving interest rates unchanged.

9. In the classical model, the level of business investment was a function of
   a. only the expected profitability of investment projects.
   b. only the real interest rate.
   c. both the expected profitability of investment projects and the real interest rate.
   d. only the nominal interest rate.
   e. None of the above

10. Which of the following indices best signals future movements in retail prices?
    a. The implicit GDP deflator
    b. nominal GDP
    c. The consumer price index
    d. The producer price index
    e. The measure of economic welfare (MEW)

11. The IS curve will shift to the right when which of the following occurs?
    a. an increase in the money supply
b. an increase in government spending  
c. a reduction in the interest rate  
d. all of the above  
e. none of the above  

12. For each interest rate, the LM curve illustrates the level of output where  
a. the goods market is in equilibrium  
b. inventory investment equals zero  
c. money supply equals money demand  
d. all of the above  
e. none of the above  

13. The LM curve shifts down (or, equivalently, to the right) when which of the following occurs?  
a. an increase in taxes  
b. an increase in output  
c. an open market sale of bonds by the central bank  
d. an increase in consumer confidence  
e. none of the above  

14. Suppose the economy is currently operating on both the LM curve and the IS curve.  
Which of the following is true for this economy?  
a. Production equals demand  
b. The quantity supplied of bonds equals the quantity demanded of bonds  
c. The money supply equals money demand  
d. Financial markets are in equilibrium  
e. all of the above  

15. Suppose the economy is operating on the LM curve but not on the IS curve. Given this information, we know that  
a. the goods market is in equilibrium and the money market is not in equilibrium  
b. the money market and bond markets are in equilibrium and the goods market is not in equilibrium  
c. the money market and goods market are in equilibrium and the bond market is not in equilibrium  
d. the money, bond and goods markets are all in equilibrium  
e. neither the money, bond, nor goods markets are in equilibrium
16. In late 2007 and early 2008, the U.S. Federal Reserve pursued expansionary monetary policy. Which of the following will occur as a result of this monetary policy action?
   a. the LM curve shifts down
   b. the LM curve shifts up
   c. the IS curve shifts rightward as the interest rate falls
   d. the IS curve shifts leftward as the interest rate increases
   e. none of the above

17. The natural rate of unemployment is the rate of unemployment
   a. that occurs when the money market is in equilibrium
   b. that occurs when the markup of prices over costs is zero
   c. where the markup of prices over costs is equal to its historical value
   d. that occurs when both the goods and financial markets are in equilibrium
   e. none of the above

18. The labour force is defined as
   a. the sum of the employed and unemployed
   b. the total number employed
   c. the total number of working age individuals in the population
   d. the sum of the number of employed, unemployed and discouraged individuals

19. Which of the following represents a short-run effect of a monetary expansion?
   a. an increase in output
   b. a reduction in the interest rate
   c. an increase in the price level
   d. all of the above
   e. none of the above

20. Based on the aggregate supply relation, an increase in current output will cause
   a. a shift of the aggregate supply curve
   b. an increase in the current price level
   c. a change in the expected price level this year
   d. an increase in the expected price level and an upward shift of the AS curve
   e. an increase in the markup over labour costs

(20)
Section B:
Choose any FOUR questions. Each Question Carries 20 Marks.

Question 2

a) Use a relevant diagram to illustrate and explain why interest rate adjustment is the first line of defense for full employment in the classical system. (13)

b) Briefly define an endogenous variable and an exogenous variable. What variables are endogenous in the classical model? What variables are exogenous? (7)

Question 3

a) Base your argument on the views of the Mercantilists. Explain why the export of bullion was prohibited. (6)

b) Explain how an increase in the public's taste towards less leisure would affect the labor market, the production function, and aggregate output. Provide graphs to illustrate. (14)

Question 4

a) Use a relevant diagram to illustrate and explain why an increase in government expenditure financed by selling bonds to the public pushes the interest rate up by enough to crowd out an equal amount of private expenditure. (14)

b) The Cambridge money demand is given by $M^d = kPY$.
Suppose money supply is fixed at 200R, the income is 400R and $k$ is 0.5.
   i. What is the initial price level? (2)
   ii. Suppose $k$ drops by 0.25, calculate the new price level. (2)
   iii. Comment on the change of aggregate price level. (2)

Question 5

a) Illustrate and explain the relationship between the slope of the IS curve and the effectiveness of an expansionary monetary policy. (10)
b) Explain in the concept of the natural rate of unemployment. What are the implications of Milton Friedman's theory of the natural rate of unemployment for the effectiveness of economic stabilization policies (5)

c) Discuss the quantity theory of money according to the monetarist theory. (5)

Question 6

a) What is the key difference between the classical and Keynesian aggregate supply functions? What is the key factor that drives these differences? (10)

b) According to Keynesian aggregate demand schedule, illustrate using a graph the effect of price changes on the LM schedule. (10)

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