INSTRUCTIONS:

• TOTAL MARKS: 75. DURATION: 75 MINUTES.

• PLEASE ANSWER YOUR MCQS IN THE TABLE PROVIDED ON THE ADDITIONAL SHEET PROVIDED AND OTHER ANSWERS IN THE SPACE PROVIDED.

• FOR SHORT ANSWER AND EASY TYPE QUESTIONS
  ➢ YOU MUST SHOW YOUR ALL WORK TO GET FULL MARKS. IF YOU DO NOT SHOW WORK, YOU MAY NOT GET FULL MARKS EVEN FOR A CORRECT ANSWER.

  ➢ USE THE MARKS ASSIGNED TO EACH QUESTION AS A GUIDE TO ALLOCATING YOUR TIME ACROSS QUESTIONS.

Good Luck on Your Exam
PART A: MCQ

(There are 30 MCQs in this section which is worth 30 marks)

01. In macroeconomics, the "output gap" is the difference between
   a) real and nominal national income
   b) output and employment
   c) potential real national income and actual real national income
   d) real GNP and real GDP
   e) output in the current year and output in the base year

02. When the unemployment rate is higher than the natural unemployment rate, real GDP is ________ than potential GDP and the output gap is ________
   a) unchanged; unchanged
   b) smaller; positive
   c) smaller; negative
   d) greater; positive
   e) greater; negative

03. The table below provides macroeconomic data for a hypothetical economy. Dollar amounts are all in constant-dollar terms.

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Output (billions of $)</th>
<th>Potential Output (billions of $)</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>402</td>
<td>404</td>
<td>7.1</td>
</tr>
<tr>
<td>2003</td>
<td>408</td>
<td>411</td>
<td>7.2</td>
</tr>
<tr>
<td>2004</td>
<td>415</td>
<td>415</td>
<td>6.3</td>
</tr>
<tr>
<td>2005</td>
<td>420</td>
<td>418</td>
<td>5.9</td>
</tr>
<tr>
<td>2006</td>
<td>422</td>
<td>420</td>
<td>6.0</td>
</tr>
<tr>
<td>2007</td>
<td>420</td>
<td>423</td>
<td>7.0</td>
</tr>
<tr>
<td>2008</td>
<td>425</td>
<td>425</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Refer to the table. In which years was this economy experiencing an inflationary gap?
   a) 2002, 2003
   b) 2006, 2007
   c) **2005, 2006**
   d) 2004, 2008

04. In the simple macroeconomic model, "autonomous expenditures" are
   a) induced expenditures
   b) non-domestic expenditures
   c) **not dependent on national income**
   d) dependent on national income
   e) those which are constant
05. The CPI in 2007 was 120 and in 2008 was 125. The inflation rate is
   a) 5%
   b) 2.6%
   c) 4.2%
   d) 112.8
   e) Insufficient information

06. The inflation rate is the annual percentage change in
   a) real GDP
   b) the quantity of money
   c) the price level
   d) labour productivity

07. Between 1910 and 2010, the real GDP grew at a faster rate than the population growth rate. So, the average
growth rate of real GDP per person in Canada was
   a) Negative
   b) positive
   c) zero
   d) unknown

08. Other things being equal, a reduction in the money supply will lead to a
   a) rise in the rate of interest and no change in investment expenditure
   b) fall in the rate of interest and an increase in investment expenditure
   c) rise in the rate of interest and a decrease in investment expenditure
   d) rise in the rate of interest and in increase in investment expenditure
   e) fall in the rate of interest and a decrease in investment expenditure

09. According to the quantity theory of money, if the money supply doubles
   a) real income will double
   b) money prices will be halved
   c) there will be no effect on money prices
   d) money prices will double
   e) relative prices will double

10. The largest component of the liabilities of the Bank of Canada is
   a) Government of Canada securities
   b) deposits of commercial banks and other financial institutions
   c) loans to private individuals
   d) Government of Canada deposits
   e) Canadian dollars in circulation

11. Refer to the table. Assume that Bank North is operating with no excess reserves. What is their actual reserve
    ratio?

    | Bank North's Balance Sheet |
    | Assets | Liabilities |
    | Reserves | Deposits |
    | $500 | $2200 |
    | Loans | Capital |
    | $2000 | $300 |
    | $2500 | $2500 |

    a) 13.6%
    b) 20%
    c) 12%
    d) 25%
    e) 22.7%
12. The main objective of the Bank of Canada is to
   a) Maintain a low and stable inflation rate
   b) Keep the unemployment rate low
   c) Increase economic growth rate high
   d) Keep the prime interest rate at 3 percent

13. Full-employment level of unemployment or the natural unemployment is
   a) a goal that can never be achieved by the economy
   b) then unemployment when the economy's resources were fully employed at a normal intensity of use
   c) achieved during periods when all of the labour force is employed
   d) the GDP that could be produced if the economy's resources were fully employed at their maximum intensity of use

14. The currency that is in circulation in Canada today is
   a) fractionally backed by gold
   b) backed by the U.S. dollar
   c) not officially backed by anything
   d) fully backed by gold held at the central bank
   e) backed by the euro

15. Commercial banks hold a fraction of their deposits in cash in their vaults (or as deposits with the central bank). This fraction is known as
   a) the excess reserve ratio
   b) the fractional reserve
   c) the required reserve
   d) the reserve ratio
   e) the target reserve

16. The theory of economic growth concentrates on the _______ over the long run, not on _______.
   a) growth of real GDP; growth of potential GDP
   b) factor utilization rates; growth of real GDP
   c) factor utilization rates; growth of the supplies of factors
   d) growth of investment in capital goods; short-run fluctuations of investment
   e) growth of potential output; fluctuations of output around potential

17. A desire by _______ has no effect on the ability of the banking system to expand bank deposits.
   a) households to stash money in safety-deposit boxes
   b) households to maintain a certain fraction of their money holdings in the form of currency
   c) potential borrowers to be more cautious in their borrowing
   d) banks to maximize profits

18. The concept of "near money" refers to
   a) financial assets whose capital values are too unstable for them to be classified as money
   b) assets that fulfill the medium-of-exchange function but not the store of value function
   c) assets that fulfill the temporary store-of-value function but not the medium-of-exchange function
   d) cheques on demand deposits

19. The AD curve relates the price level to
   a) equilibrium nominal GDP if output is demand determine
   b) equilibrium real GDP if output is demand determined
   c) equilibrium savings and wealth
   d) desired aggregate expenditure
20. Consider the basic AD/AS macro model. A rise in an input price like the price of oil would be expected to cause a new macroeconomic equilibrium in which the price level
   a) is higher and real GDP lower than in the initial equilibrium
   b) and real GDP are lower than in the initial equilibrium
   c) is higher and real GDP remained the same as in the initial equilibrium
   d) is lower and real GDP higher than in the initial equilibrium

21. What is sometimes called the "long-run aggregate supply curve" shows the relationship between the price level and the amount of output that have adjusted to output gaps.
   a) supplied by firms after all output prices
   b) supplied by firms after all factor prices
   c) demanded by households before all factor prices
   d) supplied by firms before all factor prices

22. A characteristic of the short run in macroeconomics is that
   a) actual GDP is always less than potential GDP
   b) the output gap opens or closes as the economy moves through the phases of the business cycle
   c) actual GDP is always greater than potential GDP
   d) actual GDP is always growing at the same rate as potential GDP

23. The diagram shows an AD/AS model for a hypothetical economy. The economy begins in long-run equilibrium at point A.

![Diagram showing AD and AS curves]

After the positive aggregate supply shock shown in the diagram, which of the following would shift the AS curve leftward during the economy's adjustment process?
   a. a decrease in wages and other factor prices
   b. an increase in wages and other factor prices
   c. an increase in factor supplies
   d. an increase in the unemployment rate

24. GDP can be represented by the equation: \( GDP = F \times \left( \frac{P_x}{F} \right) \times \left( \frac{GDP}{P_o} \right) \). In this equation
   a) factor supply and employment rate are long run components but productivity is a short run component
   b) factor supply and unemployment rate are short run components but productivity is a long run component
   c) factor supply and productivity rate are long run components but employment rate is a short run component
   d) employment rate and productivity are short run components but factor supply is a long run component
25. Refer to the figure. Suppose the economy is in equilibrium at $Y_1$. A contractionary fiscal policy would restore the economy to potential output ($Y^*$) by shifting the

![Diagram](image)

- a) $AS$ curve to the left to intersect $AD$ at C
- b) $AD$ to the left to intersect $AS$ at point A
- c) $AS$ curve to the right
- d) potential GDP and the $AS$ curve to the left

26. For a given level of national income, a decrease in private consumption or government purchases will cause the equilibrium interest rate to

- a) decrease and the flow of national saving to increase
- b) increase and the flow of national saving to decrease
- c) increase and the flow of investment to decrease
- d) increase and the flow of investment to increase

27. The functions of the Bank of Canada include

- a) setting the exchange rate for the Canadian dollar on world markets
- b) acting as banker for the commercial banks
- c) acting as the lender of last resort for the largest private corporations
- d) providing deposit insurance at Canadian commercial banks

28. A decrease in the money supply is most likely to

- a) raise interest rates and investment, and lower aggregate expenditures
- b) lower interest rates, investment, and aggregate expenditures
- c) raise interest rates, lower investment, and lower aggregate expenditures
- d) raise interest rates, investment, and aggregate expenditures

29. The overnight interest rate is crucial to the Bank of Canada when it implements its monetary policy because

- a) the Bank of Canada has no ability to influence other interest rates
- b) the Bank of Canada’s first priority is to ensure the solvency of commercial banks
- c) overnight loans constitute a major source for open-market operations
- d) the overnight interest rate is linked to both short-term and long-term interest rates
30. Refer to the figure. This figure illustrates

(a) the loanable funds market
(b) only the first step of the monetary transmission mechanism
(c) the entire monetary transmission mechanism
(d) the ultimate effect of a change in the money supply on real GDP
(e) the first two steps of the monetary transmission mechanism
PART B: SAQ

This section is worth 5X7=35 marks. Please use a diagram/figure whenever required/necessary

a) Why are checks and credit cards not money? Explain.

Checks and credit cards are not money because they are not a means of payment. A check is an order to transfer a deposit from one person to another. The deposits are money but checks are not.

A credit card is an ID card that lets a person take out a loan at the instant he or she buys something. The loan still needs to be paid with money so the credit card is not a means of payment—it's not money.

b) What are the defining features of classical macroeconomics and what policies do classical macroeconomists recommend?

Classical macroeconomists believe that if the economy was left alone, it would operate at full employment—the economy is self-regulating. Classical macroeconomists assert that the proper government policy is to minimize the disincentive effects of taxes on employment, investment and technological change.
c) Using the Quantity Theory of Money, show how does the quantity of money trigger the inflation in the economy

The Quantity Theory of money: $MV = PY$

In short run, under normal circumstances, it is assumed that velocity of money, $V$, is constant.

Hence for real output $Y$

$$MV = P \bar{Y}$$

So, if quantity of money, $M$, increases, price level $P$ increases at the same proportion

$$\uparrow M \bar{V} = \uparrow P \bar{Y}$$

$\rightarrow \text{Inflation}$

d) What is stagflation and why does cost-push inflation cause stagflation?

Stagflation means, a rising price level (inflation) with no economic growth (or negative growth rate).

A cost push inflation may result in this:

If there is a supply shock, $AS$ shifts to the left — a one time increase in price level and output falls to $Y$. If $AD$ shifting policy is taken, inflation occurs. But output stays below (most of the time) the initial output.
e) Why does the Aggregate demand function slope downward?

Because of wealth and substitution effects. When price falls, for instance, real value of wealth increases, people spend more, output increases.

Or if price falls people prefer to consume more today. Transferring wealth from future generation — intertemporal substitution effect.

f) Why is the Long-run Aggregate supply function vertical?

In the LR, an economy produces full employment level of output, which is independent of price level.
g) How does a government budget surplus or deficit influence the loanable funds market?

In the loanable funds market, supply of loanable funds is determined by national savings. \( S = S_{pub} + S_{Pvt} \).

**Impact of budget surplus.**

\( S^T = S_{pub} + S \)

Supply increases - result in higher loanable funds quantity \( p \).

**Impact of deficit.**

If there is a deficit, govt borrows - affect the demand curve. Both \( r \) & funds increase.
PART C: Essay Question
(This section is worth 10 marks)

Debate on Causes of Joblessness Grows

What is the cause of the high unemployment rate? One side says unemployment is a cyclical problem. The other side says it is structural.

Which business cycle theory would say that the rise in US unemployment in last few years is cyclical? Which would say it is an increase in the natural rate? Why

It is likely that most of the mainstream business cycle theories say that the rise in the unemployment rate is cyclical in nature. Definitely the Keynesian cycle theory and new Keynesian cycle theory agree that the rise is cyclical.

The real business cycle (RBC), disagree. It regards most all unemployment as natural and so it would assert that the rise in the unemployment rate reflects a rise in the natural rate.

*END OF EXAMINATION*