Name ______________________________ SMU ID______________

ECO 3302, Spring 2025 – Midterm 2
Intermediate Macroeconomics

May 6, 2025

Examiner: Luis Perez, email: luisperez@smu.edu

Allowed utensils: Pen, eraser, and non-graphic calculator.

General Instructions:

- You have 50 minutes to complete the exam.
- The exam consists of 20 multiple choice questions (each worth 3.5 points) and 6 short-answer questions (each worth 5 points).
- There is only one (1!) valid answer per multiple choice question (MCQ). No points will be subtracted for wrong answers.
- Answer all MCQ questions in the sheet provided below.
- If you make a mistake when answering a MCQ and want to change your answer, please cross the 4 options (A, B, C, D) and clearly write on the right of box D the letter associated with your final answer.
- Be short and to the point in the short-answer questions. Correct answers typically don't require more than 5–6 lines of text.
- DO NOT REMOVE THE STAPLE FROM YOUR EXAM.
- Make sure to submit all pages of your exam.

Good luck!

MCQ Answer Sheet

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How to answer:

Ⓐ Ⓑ ● Ⓓ

Questions:

1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
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19. Ⓐ Ⓑ Ⓒ Ⓓ
20. Ⓐ Ⓑ Ⓒ Ⓓ

Multiple Choice Questions (MCQ): 70 points

1. Which of the following is NOT a fundamental cause of growth?
   (a) Luck.
   (b) Geography.
   (c) Technology.
   (d) Institutions.

2. This year's Nobel Prize winners—Acemoglu, Johnson, and Robinson—argue that differences in economic development across countries can be traced back to…
   (a) Differences in the institutions established during colonial times.
   (b) Differences in religious affiliations during colonial times.
   (c) Differences in capital-intensive technologies today.
   (d) None of the above.

3. Which of the following is true about institutions?
   (a) Institutions are man-made.
   (b) Institutions shape economic incentives and set constraints on behavior.
   (c) Institutions determine whether an state is a failed state or not.
   (d) All of the above.

4. When a gas station prices gasoline at $3.00 per gallon, it is using money as a:
   (a) Medium of exchange.
   (b) Store of value.
   (c) Unit of account.
   (d) Form of financial intermediation.

5. If the Federal Reserve aims to stimulate the economy, what action would it take in open-market operations?
   (a) Increase the Federal Funds Rate.
   (b) Sell Treasury bonds.
   (c) Increase reserve requirements.
   (d) Buy Treasury bonds.

6. When the government or the central bank prints money, it generates seigniorage revenue, and we say that this revenue is like an inflation tax. Do all people suffer the same from this tax?

   (a) No, people who hold proportionately more money suffer more.

   (b) No, the rich people suffer more because they have more money.

   (c) Yes, all people suffer the same because it affects everyone equally.

   (d) Both (a) and (b) are correct.

7. President Trump has recently announced large increases in tariffs. This might have to do with the fact that the US has been running perpetual trade deficits since...

   (a) 1930s.

   (b) 1970s.

   (c) 2001, when China joined the World Trade Organization (WTO).

   (d) 2010s, after the Great Recession.

8. The openness of an economy can be measured as...

   (a) Net exports $\times$ GDP

   (b) (Export $-$ Imports)/GDP.

   (c) (Export $+$ Imports)/GDP.

   (d) None of the above.

9. Suppose that the nominal exchange rate between the US dollar and the Mexican peso is 20 pesos/dollar. When the exchange rate falls to 15 pesos/dollar, this implies the dollar __________ against the peso, and the peso __________ against the dollar.

   (a) Depreciated; appreciated.

   (b) Depreciated; depreciated.

   (c) Appreciated; appreciated.

   (d) Appreciated; depreciated.

10. One reason why there is unemployment in the United States is the unionization of workers. Which of the following is true about the US unionization rate?

   (a) It has been falling since 1985 and is about 10% today.

   (b) It has been constant since 1985 and is about 26% today.

   (c) It has been falling since 1985 and is about 26% today.

   (d) It has been constant since 1985 and is about 10% today.

11. Which of the following is true about minimum wage(s) in the US?
    (a) The federal minimum wage for regular employees is $7.25/hour.
    (b) The federal minimum wage for tipped employees is less than $7.25/hour, but they earn a minimum of $7.25/hour because their employer is responsible for making sure they reach the federal minimum wage.
    (c) The minimum wage varies by state.
    (d) All of the above.
12. The Fed typically intervenes to eliminate or reduce negative economic fluctuations. We say that monetary policy in the short run is __________ and in the long run is __________.
    (a) Neutral; non-neutral.
    (b) Non-neutral; non-neutral.
    (c) Non-neutral; neutral.
    (d) Neutral; neutral.
13. What is the difference between classical and Keynesian macroeconomic theory?
    (a) In classical macroeconomic theory, prices have a market-clearing role whereas in Keynesian theory, they don't necessarily have that role.
    (b) According to classical macroeconomic theory, output depends on factor supplies and available technologies, whereas Keynesian theory postulates that output depends on animal spirits.
    (c) Both (a) and (b) are correct.
    (d) None of the above.
14. What is a potential drawback of expanding aggregate demand in response to an adverse supply shock?
    (a) It reduces the natural level of output.
    (b) It can lead to a permanently higher price level.
    (c) It has no significant impact on the economy.
    (d) It will always cause a recession.
15. In our models of aggregate demand and aggregate supply, we formalize the idea that prices are fully sticky in the short run by drawing a ...
    (a) Horizontal aggregate supply curve.
    (b) Vertical aggregate supply curve.
    (c) Horizontal aggregate demand curve.
    (d) Vertical aggregate demand curve.

16. One of the advantages of taking Intermediate Macroeconomics at SMU is to learn how to think like an economist. Today, economists' thinking is that:

    (a) In the short run, prices are sticky, and aggregate demand influences income.

    (b) In the long run, prices are flexible, and aggregate supply determines income.

    (c) Both of the above.

    (d) None of the above.

17. Which of the following is true about a change in money supply in the short run?

    (a) It shifts the aggregate demand curve.

    (b) It affects the equilibrium interest rate.

    (c) None of the above.

    (d) Both (a) and (b) are correct.

18. In the *IS–LM* model, ______________ is an *exogenous* variable.

    (a) Price.

    (b) Interest rate.

    (c) Output.

    (d) None of the above.

19. Suppose the marginal propensity to consume (MPC) is 0.6. If the government increases spending by \$100 million, output rises by ______________; and if the government cuts taxes by the same amount, output rises by ______________.

    (a) \$150 millions; \$250 millions.

    (b) \$250 millions; \$150 millions.

    (c) \$300 millions; \$100 millions.

    (d) \$100 millions; \$300 millions.

20. In the *IS–LM* model, fiscal policy has both partial-equilibrium (PE) and general-equilibrium (GE) effects on output. What is the difference between these effects?

    (a) The PE effect is the immediate effect of the policy, while the GE effect is the ultimate effect of the policy on output once the interest rate responds.

    (b) There is no difference between PE and GE effects on output.

    (c) The GE effect is the immediate effect of the policy, while the PE effect is the ultimate effect of the policy on output once the interest rate responds.

    (d) None of the above.

Short–Answer Questions: 30 points

Name ____________________________ SMU ID______________

1. **The quantity theory of money establishes the (long-run) relationship between nominal GDP and the money supply and the velocity of money. Suppose money velocity is constant and real GDP in the US grows at 2% per year. If the Fed sets its inflation target at 3%, by how much must the money supply increase or decrease?** *Show all the steps of your derivations.*

2. **Italy, a country that you may visit this summer, is a small open economy (SOE) that registered a trade deficit in 2022. Draw a graph that clearly illustrates Italy's trade balance, assuming that savings are independent of the interest rate, and indicate which variable (if any) Italy takes as given.** *Hint*: Some national accounting may help.

3. **In classic economic models, the wage adjusts so that people wanting to work find a job. In the real world, however, wages are not fully flexible. Assuming the supply of workers is fixed, make a graph that illustrates two situations: (i) no unemployment, (ii) unemployment. Clearly indicate what each axis is.** *Hints*: You only need one graph to show (i) and (ii). You need to display real wages, and the supply and demand of workers.

4. **In the unemployment lecture, we saw that the US always registers a positive level of unemployment—typically in the order of 4–6%. Name and explain 3 reasons why the labor market does not clear** (ie, why do firms don't pay lower wages so that they can employ all workers seeking to work?)

5. **Consider the model of aggregate demand and aggregate supply, and suppose President Trump names you chairman of the Federal Reserve Bank. Because the economy is currently overheating, you decide to reduce the money supply. Illustrate the effects of your policy both in the short run and in the long run. Is money neutral and, if so, when? How can you see this in your graphs?** *Hint*: (i) You need two graphs, one for the short run, another one for the long run. (ii) The quantity theory of money may be helpful.

6. **What is the most interesting thing you've learned in this class? Why? And what has been most the challenging part of this course? Why?**