

Soochow University, Winter Session I, 2021 ECON202 (Dr. Lei Pan) Mid-term Exam Due Friday, December 24 2021 at 2:50pm Taipei Time

Instruction to Students:

- 1. The exam duration is **2 hours** plus **10 minutes** reading time.
- 2. This is a **closed-book** exam and calculators are permitted.
- 3. This exam consists of **THREE** sections: Section A: TRUE/FALSE questions, Section B: multiple-choice questions, and Section C: problem solving questions.
- 4. Read each statement in Section A carefully. State "TRUE" or "FALSE" for each of the statement. You **MUST** justify your answers. There are four questions in total, each of them is worth 5 marks.
- 5. Read each multiple choice question and answer choice carefully and choose the ONE best answer. There are 20 questions in total, each of them is worth 3 marks.
- 6. The third section contains four problem solving questions. All of them carrying 20 marks in total. Student **MUST** answer each question in Section C on a **FRESH page** of the answer book.
- 7. Try to answer all questions. In general, if you have some knowledge about a question, it is better to try to answer it. You will not be penalized for guessing.
- 8. You may work on the three sections in any order that you choose. Be sure to allocate your time carefully so that you are able to complete the entire exam with the exam session.

Please do NOT start this exam until instructed to do so.

Merry Christmas and Good luck!



Section A: TRUE/FALSE Questions [Total = 20 marks]

Consider each of the following statement. Say whether you believe the statement is true or false. Briefly explain your answer in words. Note that most of the marks will be given for the explanation.

Question 1. [5 marks] GDP is the value of all goods and services produced in the economy.

Question 2. [5 marks] The following relationship always holds: GDP deflator > CPI > Core CPI (energy and food prices are removed).

Question 3. [5 marks] If the actual rate of unemployment is above the natural rate of unemployment, then the economy is operating above its full capacity.

Question 4. [5 marks] The saving curve in the loanable funds model is upward sloping because interest rate has a positive effect on saving.

Section B: Multiple Choice Questions [Total = 60 marks]

Choose ONE of the best answers for each of the following questions. Each question is worth 3 marks.

Question 5. [3 marks] Which of the following is NOT correct?

- A. The consumer price index gives economists a way of turning dollar figures into meaningful measures of purchasing power.
- B. The consumer price index is used to measure the quantity of goods and services that the economy is producing.
 - C. The consumer price index is used by economists to measure the inflation rate.
- D. The consumer price index is used to monitor changes in the cost of living over time.

Question 6. [3 marks] A good is produced by a firm in 2012, added to the firm's inventory in 2012, and sold to a household in 2013. As a result, on net,

A. 2012 GDP increased and 2013 GDP decreased.

- B. 2012 GDP increased and 2013 GDP did not change.
- C. 2012 GDP did not change and 2013 GDP increased.
- D. 2012 GDP decreased and 2013 GDP increased.

Question 7. [3 marks] Consider the following three items of spending by the government: (1) the federal government pays a \$500 unemployment benefit to an unemployed person; (2) the federal government makes a \$2,000 salary payment to a Navy lieutenant; (3) the city of Bozeman, Montana makes a \$10,000 payment to ABC Lighting Company for street lights in Bozeman. Which of these payments contributes directly to government purchases in the national income accounts?

- A. only item (1)
- B. only items (2) and (3)
- C. only items (1) and (2)
- D. only item (2)

Question 8. [3 marks] Which of the following is NOT a reason that paying efficiency wages may increase a firm's profit?

- A. Efficiency wages decrease a country's natural rate of unemployment and therefore increase its standard of living.
- B. Efficiency wages decrease worker turnover and therefore decrease hiring and training costs.
- C. Efficiency wages decrease worker shirking and therefore increase worker productivity.
- D. Efficiency wages increase worker health and therefore increase worker productivity.

Question 9. [3 marks] The BLS classifies people who would like to work but have given up looking for a job as

- A. unemployed. If they were classified as out of the labor force, the reported unemployment rate would be larger.
- B. unemployed. If they were classified as out of the labor force, the reported unemployment rate would be smaller.

- C. out of the labor force. If they were classified as unemployed, the reported unemployment rate would be larger.
- D. out of the labor force. If they were classified as unemployed, the reported unemployment rate would be smaller.

Question 10. [3 marks] If there is a shortage of loanable funds, then

- A. the demand for loanable funds will shift right so the real interest rate rises.
- B. the supply of loanable funds will shift left so the real interest rate falls.
- C. there will be no shifts of the curves, but the real interest rate rises.
- D. there will be no shifts of the curves, but the real interest rate falls.

Question 11. [3 marks] When inflation rises, the nominal interest rate

- A. rises, and people desire to hold less money.
- B. rises, and people desire to hold more money.
- C. falls, and people desire to hold more money.
- D. falls, and people desire to hold less money

Question 12. [3 marks] Risk aversion helps to explain various things we observe in the economy, including

- A. adherence to the old adage, "Don't put all your eggs in one basket."
- B. insurance.
- C. the risk-return trade-off.
- D. All of the above are correct

Question 13. [3 marks] In 2009, the imaginary nation of Dorados had a population of 8,000 and real GDP of 3,000,000. During the year its real GDP per capita grew by about 2.9%. Which of the following sets of growth rates is approximately consistent with this growth in real GDP?

- A. 2% population growth and 6% real GDP growth
- B. 6% population growth and 2% real GDP growth
- C. 4% population growth and 7% real GDP growth
- D. 7% population growth and 4% real GDP growth

Question 14. [3 marks] Which of the following is human capital?

- A. understanding how to use a company's accounting software
- B. a student loan
- C. training videos for new corporate employees
- D. All of the above are correct.

Question 15. [3 marks] The group of economists who believed that the macroeconomy worked very well on its own were

- A. microeconomists
- B. macroeconomists
- C. classical economists
- D. Keynesian economists

Question 16. [3 marks] Rapid economic growth is important because it

- A. makes some people richer
- B. eliminates scarcity
- C. makes the unemployment rate zero
- D. allows the average person to consume more goods and services

Question 17. [3 marks] Dennis is an excellent typist. However, because he has been unable to adapt to his company's new computer system, he has lost his job. He is currently seeking another secretarial position, but it is likely that he will have to acquire new skills to become employable as a secretary again. Dennis would best be

described as

- A. frictionally unemployed
- B. not in the labor force
- C. structurally unemployed
- D. cyclically unemployed

Question 18. [3 marks] Substitution bias

A. is one factor that causes the consumer price index to underestimate the inflation rate

- B. is caused by the poor quality of many products
- C. is one of the primary causes of inflation
- D. involves consumer behavior that helps explain why the consumer price index overestimates the inflation rate

Question 19. [3 marks] Assume that the U.S. population is 300 million. If 70 million individuals are legally classified as unable to work (or are less than 16 years of age), 80 million are classified as unwilling to work, and 14 million are unemployed, what is the unemployment rate?

- A. 9.3 percent
- B. 6.4 percent
- C. 10.3 percent
- D. 6.7 percent

Question 20. [3 marks] If the labor market is in equilibrium, there is no

- A. frictional unemployment
- B. structural unemployment
- C. unemployment

D. cyclical unemployment

Question 21. [3 marks] If the government wants to encourage spending on research and development, it should

- A. raise tax rates on corporate profits to raise money for the research
- B. encourage firms and households to spend money instead of saving it
- C. increase the number of years during which an inventor has exclusive patent rights to market an invention
- D. reduce patent protection so many individuals can use new products in their own research

Question 22. [3 marks] Any pro-growth policy that increases investment requires

- A. a sacrifice of current consumption spending
- B. reduced government spending
- C. decreased production of capital goods
- D. increased production of consumption goods

Question 23. [3 marks] Suppose that the level of real GDP is \$1,000,000 and the economy has 10,000 workers. Labor productivity is

- A. \$100 per worker
- B. \$0.01 per worker
- C. \$1,000,000 per worker
- D. \$1,000 per worker

Question 24. [3 marks] Because markets may not clear for several months or even several years, the classical model

- A. is no longer considered valuable by mainstream economists
- B. has no value when explaining a situation where excess supply exists

- C. is irrelevant to any discussion of a market in which excess demand exists
- D. does a better job of explaining long-run growth than short-run fluctuations

Section C: Problem Solving Questions [Total = 20 marks]

Question 25. [5 marks] Decide whether each of the following transactions is included in GDP. If the transaction is included, determine which component of final spending it represents. If the transaction is excluded from GDP, explain why.

- (a) [1 mark] Your local ice cream maker buys peaches to make peach ice cream.
- (b) [1 mark] Your local ice cream maker buys a new and improved ice cream maker.
 - (c) [1 mark] You buy peach ice cream from your local ice cream maker.
- (d) [1 mark] Your local ice cream maker sells peach ice cream to a restaurant that serves peach smoothies.
- (e) [1 mark] Your cousin in Canada buys peach ice cream from your local ice cream maker.

Question 26. [5 marks] In Merryland, there are only 3 goods: popcorn, movie shows, and diet drinks. The following table shows the prices and quantities produced of these goods in 1980, 1990, and 1991:

	1980		1990		1991	
	P	Q	P	Q	P	Q
Popcorn	1.00	500	1.00	600	1.05	590
Movie Shows	5.00	300	10.00	200	10.50	210
Diet Drinks	0.70	300	0.80	400	0.75	420

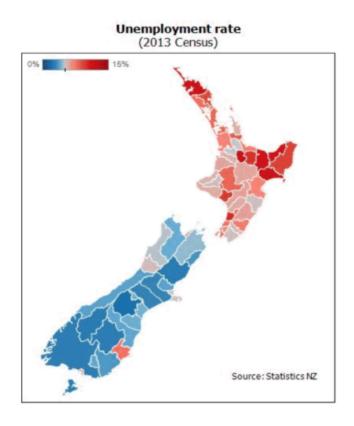
Note: The quantities (Q) in the table above are not used in answering the questions below. These would be used, however, to calculate both GDP and the GDP deflator. (The GDP deflator is the price index associated with GDP, where the bundle of goods under consideration is the aggregate output of the economy. It is used to convert between nominal and real GDP.)

- (a) [3 marks] A "market bundle" for a typical family is deemed to be 5 popcorn, 3 movie shows, and 3 diet drinks. Compute the consumer price index (CPI) for each of the three years, using 1980 as the base year.
- (b) [2 marks] What was the rate of inflation from 1990 to 1991, using the CPI you calculated in (a)?

Question 27. [5 marks] Use the loanable funds market diagram to analyze the effects of the following on saving, investment and real interest rate. Explain your reasoning.

- (a) [2 marks] Consumers become more future-oriented and thus decide to save more.
- (b) [3 marks] The government introduces an investment tax credit (assume it is offset by other types of taxes, so total net taxes, T, remain unchanged).

Question 28. [5 marks] Answer the following questions using the data map of New Zealand below.



- (a) [1 mark] Describe in words what the data are saying.
- (b) [2 marks] Speculate as to what might account for the patterns observed in the unemployment data?
- (c) [2 marks] What are some possible policy solutions that government might use to address the unemployment patterns that seem to present themselves in the data?