科目名稱	經濟學	類組代碼	共同考科
		科目碼	E0021
※本項考記	式依簡章規定所有考科均「不可」使用計算機。	本科試題	共計 4 頁

(50pts, 2pts each) Question 1: True or False. In each of the following statements, determine whether the statement is true or false. Rewrite the correct sentence if it is false.

- 1. If OPEC+ decided to cut oil production and everything else remains unchanged, the oil price will increase.
- 2. Housing demand is elastic because there are no good substitutes.
- 3. If the marginal social benefit of a car exceeds the marginal social cost of a car, production is NOT efficient because we are producing too many cars.
- 4. When the labor supply is perfectly inelastic, imposing minimum wages will not result in unemployment.
- 5. If the elasticities of demand for alcohol, tobacco and gasoline are low and the elasticities of supply are high, then the burden of these taxes falls more heavily on buyers than on sellers.
- 6. Diminishing marginal utility means a downward-sloping total utility curve.
- 7. Indifference Curves never intersect.
- 8. Over the range of output for which the average product of labor curve is negatively sloped, the average variable cost curve is positively sloped.
- 9. A perfectly competitive firm definitely will shut down in the short run if its price is below its average total cost.
- 10. If a firm is making zero economic profit in the long run, it will definitely quit the market because it is not making any money.
- 11. A profit-maximizing monopoly always produces an output in the inelastic range of its demand curve.
- 12. A monopoly that can perfectly price discriminate creates no deadweight loss.
- 13. Firms in monopolistic competition can make an economic profit in the long run.
- 14. In game theory, one game can only yield at most one Nash equilibrium.
- 15. Unemployment rate always decreases when the total number of unemployed people decreases.
- 16. CPI is biased upward when firms lower the quality instead of the price of products during a recession.
- 17. The United States has the largest GDP per person in the world in 2022.
- 18. Nominal interest rate is the opportunity cost of investment.
- 19. Bitcoin should be considered as money if most firms accept it as a medium of exchange even without the approval of the central bank.
- 20. Federal Fund rate is higher than the discount rate because banks can always borrow from the Fed through the discount window.

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- 21. According to interest rate parity, a currency would appreciate immediately after a rate hike by the central bank.
- 22. A rise in the oil price shifts the short-run aggregate supply leftward.
- 23. Consider both the demand-sided and supply-sided effects, the government expenditure multiplier must be larger than the tax multiplier because government expenditure increases GDP directly.
- 24. Core inflation is more important than overall inflation because it focuses on food and energy prices which consumers care the most.
- 25. Many central banks set the target inflation rate at 2 percent instead of zero. This is because economies with high inflation tend to perform better than economies with price stability.

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(25pts) Question 2: Consider the following demand and cost function for a monopoly firm.

Price

12

10

MC

ATC

AVC

Figure 1

8

6

D

10

Quantity

12

a. (5) Calculate the price elasticity of demand at Price = 6.

4

b. (5) Calculate the monopoly price.

2

4

2

0

- c. (5) Calculate the economic profit.
- d. (5) Calculate the consumer surplus and producer surplus.
- e. (5) Calculate the deadweight loss.

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(25pts) Question 3: Consider the following AD-AS graph where LAS and SAS denote Long-run AS and Short-run AS, respectively.

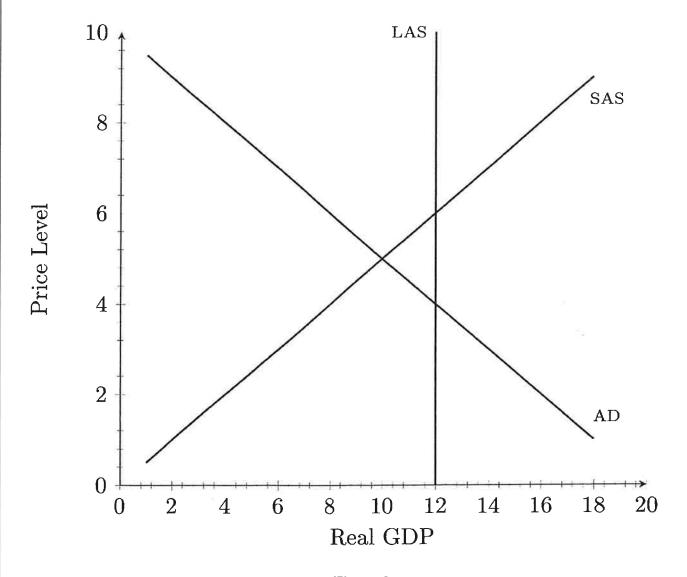


Figure 2

- a. (5) What are the equilibrium price level and GDP in the short run?
- b. (5) What are the equilibrium price level and GDP in the long run if no exogenous changes apply to the economy.
- c. (5) If the government wants to avoid the recession with a tax cut, what are the equilibrium price level and GDP?
- d. (5) Continuing from part (c), if a tax cut provides further supply-side effects and shifts the LAS by 2. What are the long-run equilibrium price level and GDP?
- e. (5) Instead of fiscal policy, suggest a policy that can bring the economy to the equilibrium in part (c).