科目名稱	經濟學	類組代碼	共同考科
		科目碼	E0021
※本項考試依簡	章規定各考科均「不可」使用計算機	本科試題共計 4 頁	

(50pts, 2pts each) Question 1: In each of the following statements, determine whether the statement is true or false. If false, provide the correct statement.

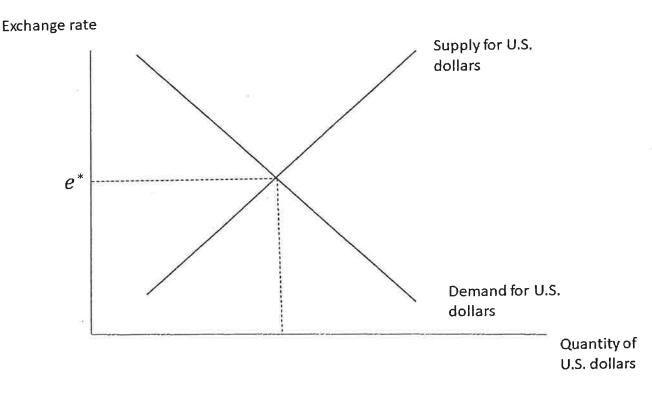
- A president candidate promises to produce more defense goods without any decreases in the production of other goods. This promise can be valid if the country is producing at a point on its production possibilities frontier.
- 2. The price of eggs rises. As a result, people have eggs for breakfast on fewer days and eat cereal instead. This behavior is an example of a decrease in the quantity demanded of eggs because of the substitution effect.
- 3. A decrease in the expected future price of cars decreases the current quantity demanded of cars, that is, there is a movement upward along the demand curve for cars.
- 4. When the price elasticity of demand is infinite, the demand for a good is perfectly elastic.
- 5. Suppose a consumption tax is imposed on a good. This will increase the price paid by the buyer but leave the price received by the seller unchanged.
- 6. A sales tax on sellers of a good shifts the supply curve rightward because the tax is like a cost of production.
- 7. A minimum wage set below the equilibrium wage rate has no effect.
- 8. A consumer will maximize utility when the marginal utility is equal for all goods.
- 9. For a person who consumes only pizza and burger, the slope of the budget line is called the marginal rate of substitution between perfect substitutes.
- 10. When two goods are perfect complement, their indifference curves are straight lines.
- 11. If marginal cost is rising, then average variable cost must be rising.
- 12. All else equal, if there are diminishing returns to scale, then production will decrease if both capital and labor increase.
- 13. When a corporation decides to include its own corporate stock as part of the compensation for its employees, it is trying to solve the adverse selection problem.
- 14. The core inflation is much more volatile than the overall inflation.
- 15. Real GDP is the production of final goods and services valued at the ratio of current prices to constant prices.
- 16. In the foreign exchange market, if the demand for NT dollars permanently decreases, the Taiwan's central bank can maintain the exchange rate at its old equilibrium level indefinitely by buying NT dollars.

- 17. The unemployment rate measures the percentage of people in the labor force who can't find a job.
- 18. Structural unemployment usually lasts longer than frictional unemployment.
- 19. The opportunity cost of holding money is the inflation rate.
- 20. One reason the aggregate expenditure curve slopes upward is because investment increases when real GDP increases.
- 21. If the Fed buy bonds in the open market, U.S. net exports will decrease.
- 22. If there is a shortage of loanable funds, then the quantity of loanable funds demanded is greater than the quantity of loanable funds supplied and the interest rate is below equilibrium.
- 23. If *P* denotes the price of goods and services measured in terms of money, then an increase in the value of money is associated with a decrease in *P*.
- 24. Let the nominal exchange rate be foreign currency per Taiwan dollar. Other things the same, an increase in the foreign price level reduces the real exchange rate. This reduction could be offset by a decrease in the domestic price level.
- 25. A rise in the mortgage rate is likely to cause the demand curve for houses to shift to the left.

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(25pts, 5pts each) Question 2: Figure 1 shows the equilibrium in the foreign exchange market (FX) where U.S. dollars are exchanged for NT dollars.

Figure 1: Foreign Exchange Market



- a. If the exchange rate is fixed above e^* , which currency is overvalued?
- b. If the NT dollar is allowed to float, what will happen at exchange rates above e^* ?
- c. If Taiwan's central bank would like to keep the exchange rate above e^* , what should the central bank do?
- d. Use the supply and demand model to show the central bank FX market intervention mentioned above.
- e. Assume that initially the FX market is in its equilibrium. Suppose that the Taiwan's demand for beef imported from the U.S. increases sharply. Other things being unchanged, how would this affect the value of the NT dollar? Use the graph to explain.

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(25pts, 5pts each) Question 3: Ron Weasley and Hermione Granger are trying to decide what to do on a Friday night. They are each working in their rooms, and cannot communicate. They have to decide where to meet:

- At the Three Broomsticks to watch the Quidditch Cup (denoted by strategy B).
- At the library to study (denoted by strategy L).

They are each only happy if they are together, but Ron has a preference for the Three Broomsticks while Hermione has a preference for the library. Therefore, their payoffs are zero if they end up in different locations, one if they end up together in their non-preferred location, and 2 if they end up in their preferred location.

- a. Let Ron (denoted by player R) be the row player, and Hermione (denoted by player H) be the column player. Show the payoff matrix represents a simultaneous-move game between Ron and Hermione.
- b. What is the dominant strategy of Ron?
- c. What is a Nash equilibrium?
- d. Find the Nash equilibrium (if any) in this game.
- e. What will be the best strategy for Ron if he can make a decision first?