考 試 科 目	經濟學	所 別	商學院共同科	考試時間	2月26日(日) 第一節

Multiple Choice (1% each, 20% in total)

1. The market structure of an industry where firms have to invest a fixed cost before producing goods cannot be perfect competitive because
 (a) the average cost decreases as production level decreases.
 (b) the average cost is almost always higher than the marginal cost.
 (c) the goods each firm produced are not perfectly substitute.
 (d) firms always earn positive profit.

2. Suppose in a country, there is one firm in an industry. Suppose also there is infinite number of firms producing the same good in the rest of world. What is the possible impact on welfare when the country opening up to trade
 (a) There will be no deadweight loss in the country.
 (b) The deadweight loss still exists but smaller under trade.
 (c) The deadweight loss is larger under trade
 (d) The producer surplus is larger under trade.

3. Suppose there are two countries. In the same industry, each country has only one producer. Producers produce the same good. Two producers have the same cost function and face the same demand function. Suppose there is international trade between two countries and producers choose output to maximize profit. There is also no collusion between firms.
 (a) Compared with the scenario when there is no trade, the price charged by a firm is lower.
 (b) Compared with the scenario when there is no trade, the production level of each firm is larger.
 (c) Compared with the scenario when there is no trade, the deadweight loss is larger.
 (d) Compared with the scenario when there is no trade, the profit of each firm increases.

4. In the industry with monopolistic competition,
 (a) the price charged by a firm is larger than the average cost.
 (b) the price charged by a firm is lower than the average cost.
 (c) the number of producers increases as the aggregate demand increases.
 (d) the number of producers decreases as the aggregate demand increases.

5. In the oligopoly economy with two identical producers producing the same product, when two producers collaborate to maximize aggregate profit
 (a) The aggregate production level is higher than that when there is only one producer.

備 註	試 題 隨 卷 繳 交

考試科目	經濟學	所別	商學院共同科	考試時間	2月26日(日) 第一節

(b) The aggregate production level is lower than that when there is only one producer.
(c) The aggregate production level is the same as that when there is only one producer.
(d) The price is lower than that when there is only one producer.

6. Ryan has an income of $3,000. When the price of good A is $50 and the price of good B is $30, he consumes 30 units of good A and 50 units of good B. After the price of good B decreases to $15, he consumes 30 units of good A and 100 units of good B. We can use the information provided to conclude that
(a) good A is a normal good.
(b) good A is a normal good, and good B is an inferior good.
(c) good A is an inferior good, and good B is a normal good.
(d) both goods A and B are normal goods.

7. Two drivers -Tom and Jerry- each drive up to a gas station. Before looking at the price, each places an order. Tom says, "I'd like 10 gallons of gas." Jerry says, "I'd like $10 worth of gas." What is each driver's price elasticity of demand?
(a) 0, 1.
(b) 1, 0
(c) 0, infinity.
(d) 1, infinity.

8. Suppose buyers of computers and printers regard those two goods as complements. Then an increase in the price of computers will cause
(a) a decrease in the supply of printers and a decrease in the quantity demanded of printers.
(b) a decrease in the demand for printers and a decrease in the quantity supplied of printers.
(c) a decrease in the equilibrium price of printers and an increase in the equilibrium quantity of printers.
(d) an increase in the equilibrium price of printers and a decrease in the equilibrium quantity of printers.

9. In the market for widgets, the supply curve is the typical upward-sloping straight line, and the demand curve is the typical downward-sloping straight line. The equilibrium quantity in the market for widgets is 200 per month when there is no tax. Then a tax of $5 per widget is imposed. As a result, the government is able to raise $750 per month in tax revenue. We can conclude that the equilibrium quantity of widgets has fallen by
(a) 25 per month.
(b) 50 per month.
(c) 75 per month.
(d) 100 per month.

備註	試題隨卷繳交

考 試 科 目	經濟學	所 別	商學院共同科	考試時間	2月26日(日) 第一節

10. The total cost to the firm of producing zero units of output is
 (a) zero in both the short run and the long run.
 (b) its fixed cost in both the short run and the long run.
 (c) its fixed cost in the short run and zero in the long run.
 (d) zero in the short run and its fixed cost in the long run.

11. As a result of an open market purchase, bank reserves
 (a) rise and interest rates fall.
 (b) and interest rates both fall.
 (c) and interest rates both rise.
 (d) fall and interest rates rise.

12. Theoretically, one can distinguish a demand-pull inflation from a cost-push inflation by comparing
 (a) how fast prices rise relative to wages.
 (b) when prices rise relative to wages.
 (c) the unemployment rate with its natural rate level.
 (d) government debt to real GDP.

13. If oil prices fall at the same time that the government increases its purchases, in the short run
 (a) aggregate output and the price level will both fall.
 (b) aggregate output will increase, but the price level may either increase or decrease.
 (c) aggregate output and the price level will both increase.
 (d) aggregate output will increase, but the price level will fall.

14. The less interest-sensitive is money demand, the ________.
 (a) flatter is the LM curve
 (b) more effective is monetary policy relative to fiscal policy
 (c) steeper is the IS curve
 (d) more effective is fiscal policy relative to monetary policy

15. If currency outstanding equals $200 million, checkable deposits equal $1 billion, reserves equal $150 million, and the required reserve ratio is 0.10, the money multiplier equals
 (a) 3.14.
 (b) 3.43.
 (c) 0.86.

備 註	試 題 隨 卷 繳 交

考 試 科 目	經濟學	所 別	商學院共同科	考試時間	2月26日(日) 第一 節

(d) 4.

16. The total sales of all firms in the economy for a year
(a) equals GDP for the year.
(b) is larger than GDP for the year.
(c) is smaller than GDP for the year.
(d) Any of the above is possible.

17. The theory of purchasing-power parity implies that the demand curve for foreign-currency exchange is
(a) downward sloping.
(b) upward sloping.
(c) horizontal.
(d) vertical.

18. When a country allows trade and becomes an exporter of a good, which of the following is not a consequence?
(a) The price paid by domestic consumers of the good increases.
(b) The price received by domestic producers of the good increases.
(c) The losses of domestic consumers of the good exceed the gains of domestic producers of the good.
(d) The gains of domestic producers of the good exceed the losses of domestic consumers of the good.

19. Suppose that the adult population is 4 million, the number of unemployed is 0.25 million, and the labor-force participation rate is 75%. What is the unemployment rate?
(a) 6.25%.
(b) 8.3%.
(c) 9.1%.
(d) 18.75%.

20. If a $1,000 increase in income leads to a $750 increase in consumption expenditures, then the marginal propensity to consume is
(a) 0.75 and the multiplier is 1 1/3.
(b) 0.75 and the multiplier is 4.
(c) 0.25 and the multiplier is 1 1/3.
(d) 0.25 and the multiplier is 4.

備 註	試 題 隨 卷 繳 交

考試科目	經濟學	所別	商學院共同科	考試時間	2月26日(日) 第一節

Problem Solving (80%)

1. In a monopolistic competitive economy, each producer faces the following demand function

$$Q = \frac{1}{n} - P,$$

where Q is the production level, n is the number of producer and P is the price charged by a firm. Suppose each producer has the following cost function

$$TC = 1 + Q,$$

where TC is the total cost. Solve the production level and price charged by a firm. Please also solve the number of producer at equilibrium (it need not to be an integer.) (20%)

2. There are four industrial firms in Happy Valley.

Firm	**Initial Pollution Level**	**Cost of Reducing Pollution by 1 Unit**
A	70 units	\$25
B	80 units	\$20
C	50 units	\$15
D	40 units	\$10

The government wants to reduce pollution to 160 units, so it gives each firm 40 tradable pollution permits.

(a) Graph the demand and supply curves for tradable pollution permits. (4%)

(b) Who sells permits and how many do they sell at market equilibrium? Who buys permits and how many do they buy? What is the total cost of pollution reduction in this situation? (11%)

(c) How much higher would the costs of pollution reduction be if the permits could not be traded? (3%)

(d) What size of a corrective tax would achieve the goal of reducing pollution to 160 units? (2%)

3. Economist Michael Woodford recently says: "If prices or wages are sticky, monetary policy affects real activity, and so the consequences of an increase in government purchases depend on the monetary policy response."

(a) Please explain the first part of the above quote, why is that if prices or wages are sticky, monetary policy affects real activity? (10%)

(b) Please explain the second part of the above quote, what does it mean by "the consequences of an increase in government purchase depend on the monetary policy response"? (10%)

備註	試題隨卷繳交

考試科目	經濟學	所別	商學院共同科	考試時間	2月26日(日) 第一節

4. Consider a close economy described by:

$$Y = C + I + G$$

$$C = a + b(Y - T), 0 < b < 1, \quad I = \bar{I}$$

(a) Compute the output multiplier with respect to government consumption (dY/dG), under the assumption that G is totally financed by raising new lump-sum tax. (10%)

(b) Now, assume a proportional taxation system, i.e. $T = t \cdot Y$, where t is the average income tax rate. Under the assumption that government expenditure is totally financed by issuing bonds, show what would happen to the budget deficit (G - T) if G increases. (10%)

備註	試題隨卷繳交