

國立中山大學100學年度碩士班招生考試試題

科目：經濟學丙【企管系甲班碩士班丙組】

第一部份：單選題，共45分，答對每題3分，答錯不倒扣。

1. It costs each lakeside firm \$300 per period to use filters that avoid polluting the lake. However, each firm must use the lake's water in production, so it is also costly to have a polluted lake. The cost to each firm of dealing with water from a polluted lake is \$200 times the number of polluting firms. If the game just be played only once, the equilibrium of this game will be
 - A) both firms pollute.
 - B) only Lago pollutes.
 - C) only Nessie pollutes.
 - D) neither firm pollutes.
2. In a short-run production process, the marginal cost is rising and the average total cost is falling as output is increased. Thus, marginal cost is
 - A) below average total cost.
 - B) above average total cost.
 - C) between the average variable and average total cost curves.
 - D) below average fixed cost.
3. Suppose a competitive firm and a monopolist are both charging \$10 for their respective outputs. One can infer that
 - A) marginal revenue is \$10 for both firms.
 - B) marginal revenue is \$10 for the competitive firm and less than \$10 for the monopolist.
 - C) marginal revenue is less than \$10 for both firms.
 - D) the competitive firm is charging too much and the monopolist too little.
4. One reason that variable factors of production tend to show diminishing returns in the short run is that
 - A) too much capital equipment is idle.
 - B) there are too many workers using a fixed amount of productive resources.
 - C) the firm has become too large to effectively manage workers.
 - D) the cost of hiring additional workers increases as firms seek to hire more.
5. Suppose the demand function is: $Q=a-b*P$, where b is positive and the price P_1 gives us a price elasticity of demand equal to 1. Any price lower than P_1 will move us to the _____ part of the demand curve.

A) elastic	B) unitary elastic
C) inelastic	D) perfectly inelastic
6. Assume that a profit maximizing monopolist is producing a quantity such that marginal revenue exceeds marginal cost. We can conclude that the
 - A) firm is maximizing profit.
 - B) firm's output is smaller than the profit maximizing quantity.
 - C) firm's output is larger than the profit maximizing quantity.
 - D) firm's output does not maximize profit, but we cannot conclude whether the output is too large or too small.
7. If demand increases while supply decreases simultaneously, the new equilibrium price is _____ and the new equilibrium quantity is _____.
 - A) lower; lower
 - B) lower; indeterminate
 - C) indeterminate; higher
 - D) higher; indeterminate

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8. Suppose Job is going to buy a car and a cell phone. Assuming the marginal cost of searching for both is the same, one can predict that Job will
 - A) spend more time searching for the car than the cell phone.
 - B) spend more time searching for the cell phone than the car.
 - C) spend equal amounts of time searching for the cell phone and the car.
 - D) trust the information from her car agent but not from the cell phone salesperson.
9. The bandwagon effect corresponds best to which of the following?
 - A) snob effect.
 - B) external economy.
 - C) negative network externality.
 - D) positive network externality.
10. If a monopolist sets her output such that marginal revenue, marginal cost and average total cost are equal, economic profit must be:
 - A) negative. B) positive.
 - C) zero. D) indeterminate from the given information.
11. The cost-output elasticity equals 1.8; this implies that:
 - A) there are neither economies nor diseconomies of scale.
 - B) there are economies of scale.
 - C) there are diseconomies of scale.
 - D) marginal cost is less than average cost.
12. For a given level of inflation, if bright prospects for the future of the economy cause businesses to increase their spending on new capital, then the _____ shifts _____.
 - A) aggregate demand curve; right
 - B) aggregate demand curve; left
 - C) short-run aggregate supply line; upward
 - D) short-run aggregate supply line; downward
13. To accommodate an adverse inflation shock the Fed must _____, while to offset the effect of an increase in aggregate demand the Fed must _____.
 - A) lower the inflation rate target; adjust the real interest rate target to the level at which saving equals investment in the long run.
 - B) raise the inflation rate target; adjust the real interest rate target to the level at which saving equals investment in the long run.
 - C) maintain the inflation rate target; maintain the real interest rate target
 - D) adjust the real interest rate target to the level at which saving equals investment in the long run; lower the inflation rate target.
14. An increase in the demand for loanable funds will occur if there is
 - A) an increase in expected profits from firm investment projects.
 - B) an increase in the real interest rate.
 - C) an increase in the nominal interest rate accompanied by an equal increase in inflation.
 - D) a decrease in the real interest rate.
15. If workers leave a country to seek out better opportunities in another country, then this will
 - A) move the original economy down along a stationary short run aggregate supply curve.
 - B) move the original economy up along a stationary short run aggregate supply curve.
 - C) shift the short run aggregate supply curve of the original country to the left.
 - D) shift the short run aggregate supply curve of the original country to the right.

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第二部份：計算題，請簡列計算過程。答對每題 5 分，答錯不倒扣，共15分。

1. Assume the money supply in Wonderland is 10,000, and currency held by the public equals bank reserves. The desired reserve/deposit ratio is 0.25. What is the value of Bank reserves?
2. If the annual real rate on a 10-year inflation-protected bond equals 1.9 percent and the annual nominal rate of return on a 10-year bond without inflation protection is 4.4 percent, what average rate of inflation over the ten years would make holders of inflation-protected bonds and holders of bonds without inflation protection equally well off?
3. What is the purchase price of a Treasury bill that pays \$10,000 in one year and has an interest rate of 3 percent?

第三部份：計算分析題，40分，請盡可能描述你的經濟邏輯或計算過程。

An economy is described by the following equations and assumptions.

- ♦ Consumption function $C = 300 + 0.6(Y - T) - 1,000r$, r is real interest rate, expressed as a decimal.
- ♦ Planned investment function: $I^p = 200 - 500r$
- ♦ Government purchase(G) $G = 160$
- ♦ Export(EX) $EX = 50$
- ♦ Import(IM) $IM = 20$
- ♦ Tax $T = 300$
- ♦ Current inflation rate $\pi = 0.06$
- ♦ Desired reserve-deposit ratio = 0.3
- ♦ Money demand function $M^d = 300 - 1,000i$, i is nominal interest rate, expressed as a decimal.
- ♦ People hold money in the form of deposit.
- ♦ Current bank reserves = 54
- ♦ Potential output $Y^* = 900$

According to the above data, please answer the following questions. (40 分，各小題 5 分)

1. Use a graph to show the equilibrium of the money market. Explain why the equilibrium is an "equilibrium."
2. Find the short-run equilibrium output; show it in a Keynesian cross diagram. Does there exist any recessionary gap or expansionary gap? How much is the gap?
3. How can the government adjust (i) G and (ii) T (fiscal policy) to eliminate the output gap? If the government wants to (iii) balance its budget while eliminating the output gap, how can it do?
4. If the nation's central bank wants to eliminate the output gap, it can adjust desired reserve-deposit ratio, how can it do to eliminate the output gap.
5. The central bank's Monetary Policy Reaction Function (MPRF) is $r = r^* + g(\pi - \pi^*)$, what is the meaning of MPRF, and the value of g ?
6. If the central bank sets $r^* = 0.04$, $\pi^* = 0.05$ and $g = 0.8$, derive the AD curve and show it on a AD-AS diagram.
7. Find the short-run and long-run equilibrium output and inflation rate.
8. Suppose initially the economy is in long run equilibrium. An adverse inflation shock (ex, oil price increase) happen and push the inflation rate by 4%, use an AD-AD diagram to show short run and long run equilibrium, and how can the FED do to eliminate the recessionary gap?