

大同大學 100 學年度研究所碩士班入學考試試題

考試科目：經濟學

所別：事業經營研究所

第 1/2 頁

註：本次考試 不可以參考自己的書籍及筆記； 不可以使用字典； 不可以使用計算器。

I. Multiple choice(2 points for each)

1. Which one of the following events has GNP decreased? (A) Jonny originally bought a stock with \$105, but now sells it with \$55 in a rush for cash. (B) Mary quitted a job to become a full-time housewife. (C) Wang ordered a paint for \$100,000, but sells it later for \$300,000. (D) A local government subsidizes pig farmers 20 million dollars for the prevention of a disease. (E) A construction company builds 10 villas, but none of them sold.
2. Which one of the following events makes GDP to overestimate the economic welfare? (A) an improvement in the quality of the environment (B) an expansion in the scale of underground economy (C) an increase in the quality of goods and services (D) a destruction of the lake and mountain scenery made by the earthquake (E) family services increased by the housewives.
3. Which of the following would increase the money multiplier? (A) an increase in the currency to deposit ratio. (B) a decrease in deposits by the public. (C) a decrease in the currency to deposit ratio. (D) a decrease in Federal Reserve note in circulation.
4. During the recession, the Central Bank could take which of the following measures? (A) reduce the discount rate (B) depreciate the New Taiwan Dollars (C) compensate their interests when people buy houses (D) all of the above.
5. Compared to the multiplier in a closed economy, that number in an open economy would be? (A) large (B) small (C) sometimes large, sometimes small (D) uncomparable.
6. Assuming that the population of country A is 1.5 million whose age is over 15, that of the labor force is 1.1 million, and that of the total employment is 0.99 million, then the unemployment rate is? (A) 7.33% (B) 26.66% (C) 11.11% (D) 10%.
7. When people develop a more intense desire to hold cash at every level of the interest rate, there will be? (A) a movement in both the LM and LS curves (B) a movement up along the LM curve (C) a shift in the LM curve to the right (D) a shift in the LM curve to the left.
8. The real rate of interest is: (A) interest rate minus the rate of inflation (B) rate of inflation minus the interest rate (C) interest rate minus the internal rate of return (D) interest rate plus the rate of inflation.
9. Which of the following production function is of increasing returns to scale?(where x_1, x_2 , and $q \geq 0$) (A) $q=10 - 1/x_1 - 1/x_2$ (B) $q=10\ln x_1+10\ln x_2$ (C) $q=100 x_1 x_2 - 5 x_1^2 - 10 x_2^2$ (D) $q= x_1^{1/2} + x_2^{1/2}$.
10. A firm will shut down in the short run if? (A) it is suffering a loss. (B) fixed costs exceed revenues. (C) variable costs exceed revenues. (D) its total costs exceed revenues. (E) all of the above.
11. A production isoquant identifies? (A) The maximum output possible given fixed budget (B) the different combinations of goods that can be produced, given fixed amounts of inputs (C) the different combinations of inputs that can be used to produce a fixed level of output (D) none of the above.
12. Assuming that the tea shop in Kaohsiung is in a perfect competition market, the short-run marginal cost among 100 of them is $MC=2q+5$. If these tea shops can operate in a short run, the market price should be higher than? (A) \$3 (B) \$4 (C) \$2 (D) \$5.
13. Assuming that a monopolistic competition firm lies in a long-run equilibrium, then where it possibly produce? (A) $AFC=MR$ (B) $P=LAC$ and $P=LMC$ (C) $P=LAC$ and $P>LMC$ (D) $LAC=MR$.
14. There is 365 days in a year. The wage of a day is \$1000. Consumers can only choose one product priced at \$5000. If X denotes the number of leisure days, Y denotes the amount of the product consumed, and the utility function of the consumer is XY, how many days does the consumer work in a year? (A) 68 days (B) 182.5 days (C) 314 days (D) 294 days.
15. Which one of the following is incorrect? (A) The total asset of each company is a concept of "stock". (B) The yearly operational income of each company is a concept of "flow". (C) The earnings per share of each company is a concept of "stock". (D) The net worth per share of each company is a concept of "stock".

<背面繼續>

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- II. What shape of supply curve does not have any producer surplus? (5 points)
- III. There are only three persons in a society. Their income is 2, 4, and 6, respectively. Then what the Gini coefficient is? (5 points)
- IV. Why will it increase the money supply if the Central Bank purchases bonds from commercial banks, but it will not be so for Tatung Co. doing the same? (10 points)
- V. $C = 50 + 0.75(Y - T) - 10R$, $I = 300 - 20R$, $G = 400$, $T = 200 + 0.3Y$, $L = 0.4Y - 20R$, $(M/P) = 300$
 (C: 消費, I: 投資, Y: 產出, T: 租稅, R: 利率, G: 政府支出, L: 實質貨幣需求, M: 名目貨幣供給, P: 物價)
- (1) IS及LM線之方程式為何 (5%)
 - (2) 求均衡時之產出及利率 (5%)
 - (3) 政府支出增加60, IS線右移幅度為何 (5%)
 - (4) 政府支出增加60, 產出增加多少 (5%)
- VI. 某國之生產函數為： $Y = K^{0.3}N^{0.7}$, Y為產出, K為資本存量, N為勞動投入量。資本存量調整式： $\dot{K} = I - \delta K$; $1 > \delta > 0$ 。社會儲蓄與產出有比例關係： $S = \epsilon Y$; $1 > \epsilon > 0$ 。
- (1) 證明生產函數滿足一階齊次性質 (5%)
 - (2) 每人資本調整方程式為何? (5%)
 - (3) 靜止均衡的每人資本為何? (5%)
- VII. 假設姐姐的效用函數為 $U(W) = (W)^{0.5}$, W為財富。若有一賭局, 參加此賭局賭本為100元, 有0.6的機率得到50元, 有0.4的機率得到200元。
- (1) 說明此賭局是否為公平賭局(fair game)? (5%)
 - (2) 姐姐參加此賭局之期望效用(expected utility)為何? (5%)
 - (3) 請說明理性的姐姐會不會參與此賭局? (5%)