

東吳大學 109 學年度暑假轉學生招生考試試題

第 1 頁，共 4 頁

系級	經濟學系三年級	考試時間	100 分鐘
科目	經濟學	本科總分	100 分

※一律作答於答案卷上(題上作答不予計分)；並務必標明題號，依序作答。

I Multiple Choice Questions (60%, 5% each)

1. Which of the following best describes scarce resources?
 - a. Resources that most people cannot afford to buy
 - b. Resources that can only be distributed efficiently by the government
 - c. Resources for which the quantity demanded is the same for all economic agents
 - d. Resources for which the quantity that people want exceeds the quantity that is freely available

2. In competitive markets, firms _____.
 - a. coordinate pricing decisions with other firms
 - b. take the market price as given
 - c. have the government set maximum and minimum prices
 - d. set the market price

3. An implication of Walras' law is that:
 - a. firms always make positive profits.
 - b. if there are N markets, we only need to focus on N-1 markets
 - c. firms should shut down if they are making losses in the short run.
 - d. the Walrasian auctioneer is necessary.

4. A pure public good is:
 - a. rivalrous and excludable.
 - b. non-rivalrous and excludable.
 - c. rivalrous and expensive.
 - d. non-rivalrous and non-excludable.

5. Efficiency in consumption under convex and differentiable preferences requires:
 - a. luck.
 - b. $MRS=MRT$.
 - c. that all prices are positive.
 - d. that MRS are equal for all consumers.

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6. In a competitive equilibrium in an exchange economy with two individuals, if one individual is a net demander of a good, then:
 - a. one individual's marginal rate of substitution must exceed the other individual's marginal rate of substitution
 - b. the other individual must be a net supplier of that good
 - c. the equilibrium is not Pareto-optimal.
 - d. the other individual must also be a net demander of that good.

7. An externality occurs when _____.
 - a. the quantity demanded of a good exceeds the quantity supplied
 - b. the quantity supplied of a good exceeds the quantity demanded
 - c. the government regulates production and consumption decisions
 - d. an economic activity affects third parties not engaged in the activity

8. Suppose the annual growth rate of an economy is expected to be 3 percent. This implies that the economy's _____ is expected to _____ by 3 percent annually.
 - a. GDP per capita; increase
 - b. price level; increase
 - c. capital stock; increase
 - d. unemployment rate; decline

9. Exponential growth implies that _____.
 - a. growth rates can only be positive
 - b. growth rates will alternate between positive and negative values in every consecutive time period
 - c. relatively large differences in growth rates will translate into small differences in the level of a quantity after many years of growing
 - d. relatively small differences in growth rates will translate into large differences in the level of a quantity after many years of growing

10. A worker is said to be unemployed if he _____.
 - a. does not have a job and is not actively looking for a job
 - b. is working from home and drawing a weekly salary
 - c. has been working part-time and has been actively looking for full-time work
 - d. does not have a job, has been actively looking for one in the prior 4 weeks, and is available for work

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第 3 頁，共 4 頁

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11. Economic growth is said to be persistent, meaning that if the economy is in an expansion this quarter, it will probably _____.
 - a. experience zero growth next quarter
 - b. experience negative growth next quarter
 - c. experience positive growth next quarter
 - d. be completely unpredictable next quarter

12. On a graph with real GDP growth on the x -axis and the unemployment rate on the y -axis, you plot each year's values for Taiwan as a separate point. What does the overall trend in this graph look like?
 - a. An upward-sloping line
 - b. A vertical line
 - c. A horizontal line
 - d. A downward-sloping line

II Long Questions (40%, 20% each)

1. Consider the following maximization problem:

$$\max_{(x_1, x_2)} x_1^\alpha x_2^\beta \quad \text{s.t.} \quad p_1 x_1 + p_2 x_2 \leq M$$

where α and β are positive and add up to unity (Cobb-Douglas utility); p_1 and p_2 are the prices of good 1 and good 2, respectively; M is income.

- a. Write down the Lagrangian. (2%)
 - b. Write down the FOCs with respect to x_1, x_2 , and the Lagrange multiplier. (3%)
 - c. Derive Marshallian (uncompensated) demands. (6%)
 - d. What happens to the demand for good 1 as the price of good 1 increases? What happens if the price of good 2 increases? Are goods 1 and 2 gross complements or gross substitutes? (9%, 3% each)
2. Consider the payoff matrix below in which the first number in each cell is the payoff to Player 1 and the second number in each cell is the payoff to Player 2. Player 1's strategy set is {A, B, C, D} and Player 2's strategy set is {X, Y}.

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		Player 2	
		X	Y
Player 1	A	5,2	4,3
	B	3,1	3,2
	C	2,1	4,2
	D	4,3	5,4

- a. Which two strategies available to Payer 1 are strictly dominated? (5%)
- b. Given the results from a, does Player 2 have a dominant strategy? (5%)
- c. If the dominated strategies are deleted from the payoff matrix, what is the Dominant Strategy Equilibrium? (Please discuss in details how you get the solution) (10%)