東吳大學 115 學年度碩士班招生考試試題

系級	企業管理學系碩士班 A 組	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。

【注意事項 Instructions】本試卷分為選擇題與計算問答題兩部分，請依序作答。

Part I: Multiple Choice （共 25 題，每題 2 分，共 50 分）

Directions: Choose the best answer for each question.

1. The Phillips Curve illustrates an inverse relationship between which two variables?

   (A) Unemployment rate and economic growth rate

   (B) Unemployment rate and inflation rate

   (C) Inflation rate and economic growth rate

   (D) Unemployment rate and money supply growth rate

2. As more units of a variable input are employed, each additional unit contributes less to total output. This phenomenon is known as:

   (A) Decreasing returns to scale

   (B) Diminishing marginal rate of technical substitution

   (C) Economies of scale

   (D) Diminishing marginal returns

3. If the central bank wants to increase the money supply, which of the following policies should it implement?

   (A) Raise the reserve requirement ratio

   (B) Purchase securities in the open market

   (C) Raise the discount rate

   (D) Sell foreign currency in the foreign exchange market

4. A good with an income elasticity of demand greater than 1 is called:

   (A) A necessity

   (B) An inferior good

   (C) A luxury good

   (D) A Giffen good

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5. The difference between GNP and NNP is:

(A) Depreciation

(B) Indirect business taxes

(C) Government transfer payments

(D) Personal income taxes

6. The following table shows a consumer's weekly demand for coffee. If the price of coffee is $70 per cup, what is the consumer surplus?

Price	90	80	70	60
Quantity	1	2	3	4

(A) $10

(B) $20

(C) $30

(D) $40

7. Pareto efficiency is defined as a situation where:

(A) It is impossible to make some individuals better off

(B) It is impossible to make some individuals worse off

(C) It is impossible to make anyone better off without making someone else worse off

(D) Resources are allocated equally among all individuals

8. A coffee shop has monopoly power and sells 5 cups per hour at a price of $100 per cup. When the quantity sold increases from 5 to 6 cups, the marginal revenue (MR) is:

(A) Equal to $100

(B) Greater than $100

(C) Less than $100

(D) Cannot be determined

9. Price elasticity of demand refers to:

(A) The ratio of the percentage change in quantity demanded to the percentage change in price

(B) The ratio of the absolute change in quantity demanded to the absolute change in price

(C) The ratio of the percentage change in price to the percentage change in quantity demanded

(D) The ratio of the absolute change in price to the absolute change in quantity demanded

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10. When calculating GDP using the expenditure approach, which of the following is NOT included?

(A) Personal consumption expenditure

(B) Government consumption expenditure

(C) Exports

(D) Net foreign factor income

11. A perfectly competitive firm is a price taker, which means:

(A) The price is determined by consumers

(B) The firm is willing to produce at any price

(C) When the firm increases output, the market price does not fall; conversely, if it raises its price, the quantity demanded will drop to zero

(D) The price is determined by other firms

12. According to the simple Keynesian model, if the marginal propensity to consume (MPC) is 0.8, what is the change in national income when government spending increases by $1 million?

(A) Increase by $0.8 million

(B) Increase by $8 million

(C) Increase by $5 million

(D) Increase by $0.5 million

13. If the equation of exchange holds, and a country's nominal GNP is $100 billion with a money supply of $50 billion, what is the velocity of money?

(A) 0.5

(B) 0.8

(C) 0.2

(D) 2

14. Which of the following events will cause a decrease in the money supply?

(A) A decrease in the reserve requirement ratio

(B) The central bank purchases government bonds in the open market

(C) The central bank raises the discount rate

(D) The central bank purchases foreign currency in the foreign exchange market

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15. A transit company plans to raise ticket prices to reduce its losses. For this strategy to succeed, the necessary condition is:

(A) The price elasticity of demand for transit is greater than 1

(B) The price elasticity of demand for transit is less than 1

(C) The income elasticity of demand for transit is greater than 1

(D) The income elasticity of demand for transit is less than 1

16. When indifference curves are convex to the origin and the price of good X decreases, which of the following is true?

(A) The substitution effect increases the quantity demanded of good X

(B) The income effect increases the quantity demanded of good X

(C) The price effect increases the quantity demanded of good X

(D) All of the above

17. Two farmers both produce rice and eggs. Farmer A's opportunity cost of producing one bag of rice is 600 eggs, while Farmer B's opportunity cost is 400 eggs. Which of the following is correct?

(A) Farmer A has a comparative advantage in rice production

(B) Farmer A has a comparative advantage in egg production

(C) Farmer B has an absolute advantage in rice production

(D) Farmer B has a consumer surplus in rice production

18. Which of the following is a limitation of national income accounting?

(A) It does not account for the value of leisure

(B) It does not account for environmental damage from production

(C) It does not account for non-market transactions

(D) All of the above

19. When international oil prices rise sharply, what will happen?

(A) Prices rise and national income falls, but interest rates remain unchanged

(B) Both prices and income rise, but interest rates fall

(C) The AS curve shifts to the upper left

(D) The AD curve shifts to the upper right

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20. According to the Keynesian aggregate demand and supply model, during a recession, if the government adopts expansionary fiscal policy to increase aggregate demand, then:

(A) The price level will fall and real GDP will rise

(B) The price level will rise and real GDP will rise

(C) The price level will fall and real GDP will also fall

(D) The price level will rise and real GDP will also fall

21. Assume the hog industry is perfectly competitive. A representative firm has a long-run average cost function $LAC = Q^2 - 10Q + 100$. When the industry reaches long-run equilibrium, what is the output (Q) of this representative firm?

(A) 5

(B) 25

(C) 75

(D) 100

22. In a country where banks only accept demand deposits, the central bank sets the reserve requirement ratio at $\beta = 0.20$. The public holds currency (C) of $2 million, and the M1B money supply is $10 million. What is the money multiplier?

(A) 2.5

(B) 2.78

(C) 3.33

(D) 4.0

23. Assume the prices of goods are $P_x = 4$ and $P_y = 5$, and a consumer's income $M = 100$ is fixed. If the utility function is $U = x \cdot y$, what are the optimal quantities of x and y?

(A) $x = 10, y = 12$

(B) $x = 12.5, y = 10$

(C) $x = 10, y = 10$

(D) $x = 12.5, y = 12.5$

24. Assume that producing 1 unit of bread requires 40 hours of labor in Country A and 50 hours in Country B. Producing 1 unit of wine requires 60 hours in Country A and 70 hours in Country B. Which of the following is correct?

(A) Country A has an absolute advantage in wine production and should export wine

(B) Country A has a comparative advantage in bread production and should import bread

(C) Country B has a comparative advantage in wine production and should export wine

(D) Country B has no comparative advantage in either good and should import both

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25. Assume that both the supply and demand curves for gasoline are linear. Without taxation, per capita gasoline consumption is 500 liters. After a $7 per unit excise tax is imposed, consumption falls to 450 liters. If the population is 22 million, what is the deadweight loss from the gasoline tax?

(A) $3.85 billion

(B) $385 million

(C) $3.85 million

(D) $385,000

Part II: Problem Solving （共 4 題，共 50 分）說明：請詳列計算過程，僅寫答案不予計分。

1.（14 分）假設有一簡單凱因斯模型開放經濟體系如下，其中 Y, C, I, G 分別代表所得、消費、投資與政府支出，X, M, S, T 則分別代表出口、進口、儲蓄與賦稅：

$$Y = C + I + G + (X - M)$$

$$Y = C + S + T$$

$$C = 175 + 0.75(Y - T)$$

$$I = 300,\ G = 60,\ T = 100,\ X = 160,\ M = 20 + 0.05Y$$

A. 請計算均衡所得、可支配所得與儲蓄各為多少？(6 分)

B. 若充分就業產出水準為 2,200，經濟體系處於膨脹缺口或緊縮缺口？缺口為多大？(4 分)

C. 政府如果要利用政府支出的調整來消除缺口，應如何做？(4 分)

2.（12 分）已知稻米市場的供需函數為：$P = 20 + Q^s$，$P = 100 - Q^d$。

A. 求均衡下之消費者剩餘 (CS)、生產者剩餘 (PS) 與總剩餘 (TS)。(4 分)

B. 若政府對稻米每公斤課徵 10 元從量稅，求新均衡下之 CS、PS、TS 與無謂損失 (DWL)。(8 分)

3.（12 分）假設獨佔廠商面對的市場需求函數為 $P = 100 - q$，總成本函數為 $TC = 50q$ (固定成本為 0，邊際成本 $MC = 50$)。

A. 求此廠商的總收益 (TR)、平均收益 (AR) 與邊際收益 (MR) 函數。(3 分)

B. 求廠商短期均衡下之產量、價格與利潤。(6 分)

C. 與完全競爭市場相比，獨占造成多少無謂損失？(3 分)

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4.（12 分）假設某國銀行體系的準備金 R = 4,000 億元，通貨對存款比率為 c= 0.2，銀行的法定準備率 r = 0.1。

A.計算存款總額 (D)、通貨 (C) 與準備貨幣 (MB)。(6 分)

B.計算貨幣乘數 (m)。(2 分)

C.若央行在外匯市場購入 600 億元外匯，同時進行沖銷政策出售定期存單 400 億元，淨準備貨幣變動為何？對貨幣供給有何影響？(4 分)