

國立臺北科技大學 100 學年度碩士班招生考試

系所組別：4410 服務與科技管理研究所甲組

第三節 經濟學 試題

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注意事項：

1. 本試題共六題，配分共 100 分。
2. 請標明大題、子題編號作答，不必抄題。
3. 全部答案均須在答案卷之答案欄內作答，否則不予計分。

(1)(10%) Explain Schumpeter Mark I and Mark II.

(2)(15%) Is tight oligopoly likely to develop heavy selling expenses? Explain your answer.

(3)(15%) Suppose that the Central Bank is required to keep the inflation rate between 1 percent and 2 percent a year but with no requirement to keep trend inflation at the midpoint of this range. The Central Bank achieves its target. If initially the price level is 100,

(a)(8%) What is the range of uncertainty about the price level after 10 years?

(b)(7%) Would this type of inflation goal serve the financial markets well and provide an anchor for inflation expectations?

(4)(20%) Suppose that in Country X, investment is \$400 billion, saving is \$400 billion, tax revenues are \$500 billion, exports are \$300 billion, and imports are \$200 billion.

(a)(5%) Calculate government expenditure.

(b)(5%) What is the government budget balance?

(c)(2%) Is the government exerting a positive or negative impact on investment?

(d)(8%) What fiscal policy action might increase investment and speed economic growth?

Explain how the policy action would work.

(5)(20%) Company A's constant marginal cost of producing its electronic product is \$200, its fixed cost is \$744 million, and its inverse demand function is $p=600-25Q$, where Q is units measured in millions. Assuming that Company A is maximizing short-run monopoly profit,

(a)(9%) What are its profit-maximizing price, quantity, and profit?

(b)(6%) What is its Lerner Index?

(c)(5%) What is the elasticity of demand at the profit-maximizing level?

(6)(20%) Consider a game with two players, who cannot communicate, and in which each player is asked a question. The players can answer the question honestly or lie. If both answer honestly, each receives \$100. If one answers honestly and the other lies, the liar receives \$500 and the honest player gets nothing. If both lie, then each receives \$50.

(a)(5%) Describe the strategies and payoffs of this game.

(b)(5%) Construct the payoff matrix.

(c)(5%) What is the equilibrium of this game?

(d)(5%) Compare this game to the prisoners' dilemma. Are the two games similar or different? Explain your answer.