

科目：經濟學

適用：財金系

考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

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1. (20%) A consumer has an income of  $I$  that can be spent on two goods,  $x$  and  $y$ . The prices of these two goods are  $P_x$  and  $P_y$ , and the consumer's preferences can be represented by the utility function  $U(x, y) = x^{1/4}y^{3/4}$ .
  - (a) (10%) Derive the consumer's demand function for good  $x$ .
  - (b) (10%) Derive and interpret the consumer's income elasticity of demand for good  $x$ .
2. (30%) A small firm that operates in a perfectly competitive industry has a short-run total cost of production  $STC(q) = \frac{1}{10}q^2 + 10q + 40$ , and its product can be sold in the market at a price of 20.
  - (a) (10%) Find the firm's profit-maximizing output.
  - (b) (10%) Find the firm's maximum profit.
  - (c) (10%) Suppose that all of the fixed costs are sunk, find the firm's short-run supply curve.
3. (20%) Explain the theory of efficiency wages. Provide a reason that employers might pay efficiency wages.
4. (10%) Explain whether credit cards and debit cards are money.
5. (10%) Explain how inflation affects savings.
6. (10%) Explain the theory of purchasing-power parity.