

3.6 Firms' Short-Run Decisions to Produce and Long-Run Decisions to Enter or Exit a Market

Name: _____ Class: _____ Date: _____

Total: 8 marks

KEY WORDS exit 退出 • entry 进入 • shut-down rule 停产法则 • economic profit 经济利润 • long run 长期

Objective

Build the skills to answer exam questions on **firms' short-run and long-run decisions**.

You must be able to:

- apply the **shut-down rule** 停产法则 in the short run
- explain why a firm operates at a loss when price exceeds **average variable cost**
- explain the long-run decision to **exit** when price is below **average total cost**
- explain how economic profits attract **entry** and losses cause **exit**

1 Worked examples

Study these first. Each one shows the method for a question type used later.

■ The shut-down rule (short run)

Keep producing if $P \geq AVC$; **shut down** if $P < AVC$. Above AVC , the firm at least covers its variable costs and part of its fixed costs.

■ The exit rule (long run)

Exit the market if $P < ATC$ (it makes a loss with no fixed costs to worry about).

■ Entry and exit

Economic **profits** attract **entry**; economic **losses** cause **exit**. A firm breaks even (normal profit) where $P = \text{minimum } ATC$.

2 Practice

2.1 State the short-run shut-down rule. [1]

2.2 State when a firm should exit a market in the long run. [1]

2.3 State what happens to a market when existing firms earn economic profits. [1]

3 Exam-style questions

3.1 A firm should shut down in the short run if price is below [1]

- **A** average total cost
 - **B** average variable cost
 - **C** marginal cost
 - **D** average fixed cost
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3.2 In the long run, economic profits attract [1]

- **A** exit
 - **B** entry
 - **C** shut-down
 - **D** no response
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3.3 A firm faces $P = \$8$, $AVC = \$6$, and $ATC = \$10$.

(a) State whether it should produce or shut down in the short run. [1]

(b) Explain why. [1]

(c) State its long-run decision. [1]

Solutions

2.1 produce if price is at least AVC ; shut down if price is below AVC .

2.2 when price is below average total cost.

2.3 new firms enter, raising supply until profits fall to normal.

3.1 B.

3.2 B.

3.3 (a) produce. (b) $P = \$8 > AVC = \6 , so it covers all variable cost plus some fixed cost, losing less than by shutting down. (c) exit — $P < ATC$, so it makes a loss in the long run.