AP MICROECONOMICS • EXERCISE SHEET

4.3 Price Discrimination

Name: ____________ Class: ________ Date: __________ **Total: 9 marks**

KEY WORDS price discrimination 价格歧视 • deadweight loss 无谓损失 • market power 市场势力

Objective

Build the skills to answer exam questions on **price discrimination**.

You must be able to:

- define **price discrimination 价格歧视** and list the conditions required
- explain **perfect (first-degree) price discrimination**
- analyse its effect on output, **consumer surplus**, and **producer surplus**
- explain why perfect price discrimination is allocatively efficient with no deadweight loss

1 Worked examples

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

> ### Price discrimination
> Charging different buyers **different prices** for the same good. It needs: **market power**, a way to **separate** buyers by willingness to pay, and no **resale** between them.
>
> ### Perfect price discrimination
> The firm charges each buyer their **maximum willingness to pay**, capturing **all** consumer surplus as producer surplus.
>
> ### Efficiency
> It produces the **allocatively efficient** quantity (up to $P = MC$), so there is **no deadweight loss** — but consumers gain nothing.

2 Practice

2.1 Define price discrimination. [1]

2.2 State two conditions needed for a firm to price discriminate. [2]

2.3 State what happens to consumer surplus under perfect price discrimination. [1]

3 Exam-style questions

3.1 Perfect price discrimination charges each buyer [1]

- **A** the same price
- **B** their maximum willingness to pay
- **C** marginal cost
- **D** zero

3.2 Under perfect price discrimination, the deadweight loss is [1]

- **A** doubled
- **B** zero
- **C** at its maximum
- **D** unchanged

3.3 A firm can identify each buyer's willingness to pay and prevent resale.

(a) Name the pricing strategy it can use. [1]

(b) State what happens to consumer surplus. [1]

(c) State whether output is allocatively efficient. [1]

Solutions

2.1 charging different buyers different prices for the same good.

2.2 any two of: market power, ability to separate buyers, ability to prevent resale.

2.3 it is reduced to zero (captured by the firm).

3.1 **B**.

3.2 **B**.

3.3 (a) perfect (first-degree) price discrimination. (b) it falls to zero. (c) yes — it is allocatively efficient.