AP MICROECONOMICS • EXERCISE SHEET

1.5 Cost-Benefit Analysis

Name: ____________ Class: ________ Date: __________ **Total: 10 marks**

KEY WORDS sunk cost 沉没成本 • implicit costs 隐性成本 • explicit costs 显性成本 • opportunity cost 机会成本 • resources 资源

Objective

Build the skills to answer exam questions on **cost-benefit analysis**.

You must be able to:

- explain that rational decision-makers weigh **total benefits** and **total costs**
- distinguish **explicit costs** 显性成本 from **implicit costs** 隐性成本
- apply the rule that an action is worthwhile only if its benefits at least equal its costs
- explain why **sunk costs** 沉没成本 should be ignored

1 Worked examples

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

■ The decision rule

Undertake an action only if its **total benefit** is at least as large as its **total cost**.

■ Explicit vs implicit costs

Explicit costs are out-of-pocket payments; **implicit** costs are the opportunity cost of resources you already own (e.g. wages you could earn elsewhere).

■ Ignore sunk costs

A **sunk cost** is already spent and cannot be recovered, so it should **not** affect the decision going forward — only future costs and benefits matter.

2 Practice

2.1 State the rule for deciding whether an action is worthwhile. [1]

2.2 State the difference between explicit and implicit costs. [2]

2.3 Explain why sunk costs should be ignored in decisions. [2]

3 Exam-style questions

3.1 A sunk cost is one that [1]

A can be recovered
B cannot be recovered
C is always small
D is really a benefit

3.2 The implicit cost of running your own business includes [1]

A the rent you pay
B the wages you could have earned elsewhere
C your electricity bills
D the materials you buy

3.3 A firm has already spent $10 000 on a project (unrecoverable). Finishing it costs $3000 more and earns $4000.

(a) State whether it should finish the project. [1]

(b) Explain, correctly ignoring the sunk cost. [2]