Week 1

# A-Level Economics

Homework bundle for this week

本周作业合集

exercises.lol

## Contents 目录


**Topic 1 quiz** ........ 3

**Exercise sheet 1.1** ........ 6

**Past-paper questions 1.1** ........ 11

**Exercise sheet 1.2** ........ 14

**Past-paper questions 1.2** ........ 18

**Exercise sheet 1.3** ........ 19

**Past-paper questions 1.3** ........ 24

**Exercise sheet 1.4** ........ 25

**Past-paper questions 1.4** ........ 30

**Exercise sheet 1.5** ........ 31

**Past-paper questions 1.5** ........ 36

**Exercise sheet 1.6** ........ 41

**Past-paper questions 1.6** ........ 45

# 1. Basic economic ideas and resource allocation

**Starter Quiz · 课前小测**

A-Level Economics Name: ____________ Score: ______

1. The basic economic problem arises because:
   - ☐ wants are unlimited but resources are finite
   - ☐ people are lazy
   - ☐ governments tax too much
   - ☐ prices are too high
2. Which is a positive statement?
   - ☐ Unemployment rose to 5% last year
   - ☐ The government should cut taxes
   - ☐ Inequality is unfair
   - ☐ Pensions ought to be higher
3. In economics, ”capital” means:
   - ☐ man-made aids to production (tools, machines)
   - ☐ money in the bank
   - ☐ a country’s capital city
   - ☐ natural resources
4. In a market economy, resources are allocated mainly by:
   - ☐ the price mechanism
   - ☐ a central planning committee
   - ☐ the army
   - ☐ random chance
5. A point exactly on the PPC represents an economy that is:
   - ☐ using all resources efficiently
   - ☐ wasting resources
   - ☐ producing the impossible
   - ☐ in recession
6. The assumption ”all other things being equal” is called ceteris _________.

   ______________________________



7. The entrepreneur combines the other factors, takes the risk, and earns the profit.

   ☐ True ☐ False
8. A normative statement expresses a value judgement about what ought to be.

   ☐ True ☐ False
9. If the price is below equilibrium, there is a shortage and price tends to rise.

   ☐ True ☐ False
10. The PPC bows outward because opportunity cost rises as an economy specialises in one good.

    ☐ True ☐ False

A-Level Economics

1. **wants are unlimited but resources are finite**

   Scarcity = unlimited wants meeting finite resources; it forces choice.

2. **Unemployment rose to 5% last year**

   A positive statement is factual and testable; the others are value judgements (normative).

3. **man-made aids to production (tools, machines)**

   Capital is man-made aids to production — not money (money just buys capital).

4. **the price mechanism**

   Markets use prices (the invisible hand); command economies use central planning.

5. **using all resources efficiently**

   On the curve = full, efficient use; inside = spare capacity; beyond = unattainable.

6. **paribus**

   Ceteris paribus lets economists isolate the effect of one variable.

7. **True**

   Enterprise organises land, labour and capital and bears the risk for a profit (or loss).

8. **True**

   Normative = opinion/"ought"; positive = testable fact.

9. **True**

   Below equilibrium, demand exceeds supply → shortage → upward pressure on price until it clears.

10. **True**

    Resources are not equally suited to both goods, so each extra unit costs more of the other — a concave curve.



A-LEVEL ECONOMICS • EXERCISE SHEET

# 1.1 Scarcity, choice and opportunity cost

Name: ____________ Class: ________ Date: __________ **Total: 19 marks**

**KEY WORDS** opportunity cost 机会成本 • scarcity 稀缺 • resources 资源 • finite 有限 • wants 欲望

## Objective

Build the skills to answer exam questions on **scarcity, choice and opportunity cost** 稀缺性、选择与机会成本 — the **economic problem** 经济问题 and the trade-offs every consumer, firm and government faces.

**You must be able to:**

- explain **scarcity** 稀缺 and the **economic problem** 经济问题
- define and apply **opportunity cost** 机会成本
- explain the three questions (what, how, for whom) every economy must answer

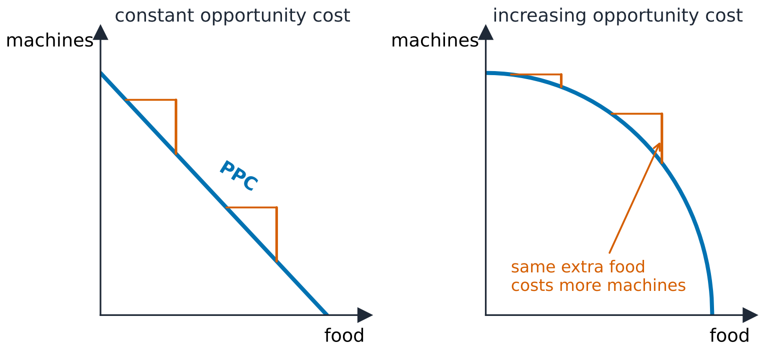
## 1 Worked examples

■ **Scarcity forces choice**

*Resources are finite* 有限的*; wants are unlimited* 无限的 *— so we must choose*

- **Scarcity:** wants are unlimited 无限 but resources are **finite** 有限, so choices must be made.

- **Opportunity cost:** the **next best alternative** 次优选择 given up when a choice is made.
- A government that spends on hospitals gives up the schools that money could have built (opportunity cost).




opportunity cost = goods forgone · bowed-out PPC ⇒ increasing opportunity cost

*A production possibility curve makes opportunity cost visible: more of one good means less of the other*

**Answer shapes** (marked by **level of response** on the assessment objectives — AO1 knowledge, AO2 application, AO3 analysis, AO4 evaluation):

- **Explain [up to 8]:** define (AO1), apply to the context (AO2), develop a chain (AO3).
- **Discuss/Evaluate [up to 12]:** add a two-sided, supported judgement (AO4).

## 2 Practice

**2.1** Define the term *opportunity cost.* [2]

**2.2** A student spends \$20 on a textbook instead of a concert ticket. State the opportunity cost. [1]



**2.3** State the three basic questions every economy must answer. [3]

## 3 Exam-style questions

**3.1** Opportunity cost is best defined as: [1]

- **A** the money price of a good
- **B** the next best alternative given up
- **C** the total cost of all alternatives
- **D** the cost of producing one more unit

**3.2** Explain, using an example, why scarcity means that producers face opportunity cost. [4]

**3.3** Discuss whether opportunity cost is the most important idea a government should consider when deciding how to spend its budget. [8]



## Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

**2.1** the next best alternative that is given up when a choice is made (2 for a clear definition; 1 for a partial idea).

**2.2** the concert ticket (the enjoyment of the concert) given up (1).

**2.3** what to produce; how to produce it; for whom to produce it (1 + 1 + 1).

**3.1** **B**. Opportunity cost is the next best alternative forgone.

**3.2** *[4]* AO1 1–2 (define scarcity and opportunity cost) + AO2/AO3 up to 2 — e.g. a factory's resources are finite, so using them to make cars means the trucks it could have made are given up → that forgone output is the opportunity cost.

**3.3** *[8]* AO1/AO2/AO3 up to 5 + AO4 up to 3 (a supported judgement). **For:** opportunity cost shows the true cost of each choice, helping spend limited funds where the benefit is greatest. **Against:** a government must also weigh equity, long-term effects and political aims, not just opportunity cost. Judgement: opportunity cost is essential to good budgeting but is one of several factors — its importance depends on the decision.

**1** What is characterised as a free good?

**A** one that has zero opportunity cost

**B** one that is non-excludable and non-rivalrous

**C** one that is supplied by the government with no charge

**D** one that receives a 100% government subsidy



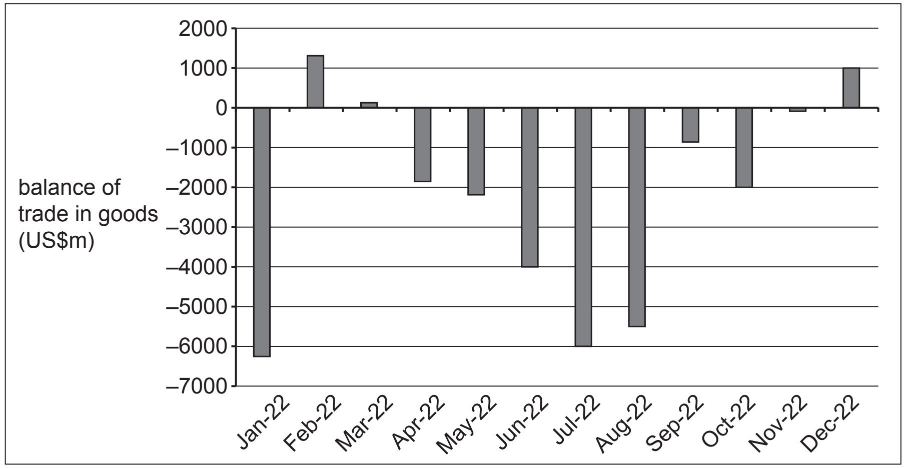


**1** **Mexico's backward-looking energy policy is bad for the country and the planet**

In 2023, Mexico's energy policies looked increasingly out of step with those in the rest of the world. The Mexican President reversed recent reforms of Mexico's energy market. These reforms increased the role of private sector firms. He changed the balance of the mixed economy by prioritising state-owned companies and stressed that Mexico should produce its own energy rather than importing it.

The government invested in a new oil refinery and decided to keep coal-fired power stations running. It also gave state-owned electricity and oil companies priority over private sector rivals, so it was harder for private firms to obtain permits to generate electricity or to explore for oil.

Mexico has traditionally exported crude oil and imported natural gas. However, the new plan is that the oil will be used to generate the country's electricity. There has been a global shift towards energy self-sufficiency but it is unclear whether Mexico has the capacity to produce enough electricity for its 130 million people. There may also be an impact on the country's balance of trade in goods which was in deficit for nine months of 2022, as shown in Figure 1.1.




*Source: tradingeconomics.com*

**Fig. 1.1 Mexico's balance of trade in goods, January 2022 to December 2022**

Energy is likely to become more expensive. Operating costs of the state-owned electricity producers are significantly higher than their private sector rivals. Its old and inefficient plants are expensive to maintain. These costs will be passed on to the consumer, either directly or by the government having to spend more on subsidies to keep down the price.

The environment will also suffer. Mexico will see less investment in renewable energy because of its change in energy policy. In the past, domestic and foreign firms in the private sector did much of the investing. The policy change means that Mexico is unlikely to meet its pledge to produce 35% of its electricity from renewable sources by 2024.

The impact of the energy policy may be felt in the economy more broadly. The earlier energy reforms had helped to bring manufacturers to Mexico by making power cheaper and more reliable. Now the uncertainty is deterring investors.

The opportunity cost of Mexico's new energy policy is huge. Economists reckon that Mexico could have produced almost half its electricity from renewable sources long before its target of 2050. Multinational companies were looking at Mexico as an alternative location to other countries, but because of Mexico's change in energy policy, those companies are likely to go elsewhere.

*Source: Adapted from: 'Mexico's energy policy', The Economist, The World Ahead 2023, published 2022*

**(a)** Using the information provided, explain whether Mexico is a mixed economy. [2]

**(b)** Explain what is meant by 'The opportunity cost of Mexico's new energy policy is huge.' [2]

**(c)** Consider the extent to which direct provision of electricity in Mexico through state-owned companies may be advantageous to consumers. [4]

**(d)** With the help of a diagram, assess whether the potential advantages of providing a subsidy to keep down the price of electricity in Mexico will outweigh the potential disadvantages. [6]

**(e)** Assess the potential benefits and limitations of Mexico keeping its oil to generate the country's electricity. [6]

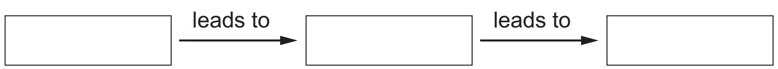
**Section B**

Answer **one** question.

**EITHER**



**2** The diagram is from a chapter on 'The Fundamental Economic Problem' in an Economics textbook. It should contain the terms *opportunity cost*, *scarcity* and *choice* in the order that identifies the fundamental economic problem.




What is the correct order for the terms to appear in the diagram?

**A** choice → opportunity cost → scarcity

**B** choice → scarcity → opportunity cost

**C** scarcity → choice → opportunity cost

**D** scarcity → opportunity cost → choice



A-LEVEL ECONOMICS • EXERCISE SHEET

# 1.2 Economic methodology

Name: ____________ Class: ________ Date: __________ **Total: 17 marks**

**KEY WORDS** ceteris paribus 其他条件不变 • value judgement 价值判断 • macroeconomics 宏观经济学 • micro- and macroeconomics 微观与宏观 • social science 社会科学

## Objective

Build the skills to answer exam questions on **economic methodology** 经济学方法论 — economics as a **social science** 社会科学, **positive and normative** 实证与规范 statements, **ceteris paribus** 其他条件不变, and **micro- and macroeconomics** 微观与宏观.

**You must be able to:**

- distinguish **positive** 实证 (fact) from **normative** 规范 (opinion) statements
- explain **ceteris paribus** and why economists use models
- distinguish microeconomics from macroeconomics

## 1 Worked examples

### How economists think

| Positive statement | Normative statement |
|---|---|
| *a statement of fact* | *a statement of opinion* |
| can be tested true or false | rests on a value judgement |
| e.g. a higher petrol price reduces the quantity bought | e.g. the government should make petrol cheaper |

*Positive (fact, testable) versus normative (opinion, value judgement) statements*

*Economics builds models 模型 and tests them with data*

- **Positive statement 实证表述**: a fact that can be tested true or false ("a higher petrol price reduces the quantity bought").
- **Normative statement 规范表述**: an opinion resting on a **value judgement 价值判断** ("the government *should* make petrol cheaper").
- **Ceteris paribus 其他条件不变**: "all other things stay the same" — change one variable at a time.
- **Micro 微观** = single markets/firms; **macro 宏观** = the whole economy.

**Answer shapes:** AO1 (define) + AO2 (apply) + AO3 (analysis) + AO4 (judgement, for evaluate questions).

## 2 Practice

**2.1** State the difference between a *positive* and a *normative* statement. [2]

**2.2** Define the term *ceteris paribus*. [2]



**2.3** State whether each is micro or macro: (a) the market for coffee; (b) a country's total unemployment. [2]

## 3 Exam-style questions

**3.1** Which is a **normative** statement? [1]

- **A** A rise in income tax reduces consumer spending.
- **B** Unemployment rose to 6% last year.
- **C** The government ought to cut income tax for the poor.
- **D** A higher minimum wage can raise firms' costs.

**3.2** Explain, with an example, why economists use the assumption of *ceteris paribus*. [4]

**3.3** Explain the difference between positive and normative statements, and why the distinction matters for economic policy. [6]

## Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

**2.1** a positive statement is about fact and can be tested true or false; a normative statement is an opinion about what should happen and cannot be tested (2 for a clear difference; 1 for a partial idea).

**2.2** a Latin phrase meaning "all other things stay the same" — holding other factors constant while one changes (2 for a clear definition; 1 for a partial idea).

**2.3** (a) micro; (b) macro (1 + 1).

**3.1** **C**. "Ought to" signals a value judgement, so it is normative.

**3.2** *[4]* AO1 1–2 + AO3 up to 2 — the real economy has many variables; by holding all but one constant (ceteris paribus), e.g. studying how price alone affects quantity demanded, economists can isolate one cause-and-effect relationship.

**3.3** *[6]* AO1 2 (define each) + AO2/AO3 up to 4 — positive statements can be tested with data, so they settle facts; normative statements rest on value judgements, so people who agree on the facts may still disagree on policy → distinguishing them helps separate what *is* from what *ought* to be done.





**6** Which statement defines market equilibrium?

**A** when *ceteris paribus* no longer applies

**B** when quantity demanded equals quantity supplied

**C** when quantity demanded is equal to price

**D** when supply can no longer expand

A-Level Economics: **w25 13**

**1** The following appeared in a newspaper article.

> 'The economies of the poorest nations have large international debts; the richest nations should cancel the debts of these nations and reduce poverty.'

What is the nature of each statement?

| | poorest nations have large international debts | richest nations should cancel these debts to reduce poverty |
|---|---|---|
| **A** | normative | normative |
| **B** | normative | positive |
| **C** | positive | positive |
| **D** | positive | normative |

A-Level Economics: **s25 12**

**1** What is the best definition of a positive economic statement?

**A** A statement that is based on fact and can be tested.

**B** A statement that attempts to influence economic decisions.

**C** A statement that is subjective and cannot be confirmed.

**D** An encouraging economic update in the opinion of the central bank.

A-Level Economics: **Specimen 1**

**1** The demand for a product is inversely related to its price, *ceteris paribus*.

What does *ceteris paribus* mean in this context?

**A** Factors affecting demand other than price are held constant.

**B** Factors affecting price other than demand are held constant.

**C** Price changes result from changes in demand.

**D** Price falls result in increased quantity de ed.

A-LEVEL ECONOMICS • EXERCISE SHEET

# 1.3 Factors of production

Name: ___________ Class: ________ Date: __________ **Total: 21 marks**

**KEY WORDS** capital 资本 • enterprise 企业家才能 • labour 劳动 • rent 地租 • interest 利息

## Objective

Build the skills to answer exam questions on **factors of production** 生产要素 — **land, labour, capital and enterprise** 土地、劳动、资本、企业家才能 and their rewards, **specialisation and the division of labour** 专业化与劳动分工, and factor **mobility** 流动性.

**You must be able to:**

- name the four factors of production and their rewards
- explain specialisation and the division of labour, with advantages and disadvantages
- distinguish occupational from geographical mobility

## 1 Worked examples

### ■ The four factors and the division of labour

| Land | Labour | Capital | Enterprise |
|---|---|---|---|
| natural resources | human work | machines and tools | risk-taking |
| *earns rent* | *earns wages* | *earns interest* | *earns profit* |

*The four factors of production and the reward each one earns*



*A car assembly line: capital 资本 + the division of labour 劳动分工*

| Factor | Reward |
|---|---|
| **land** 土地 | **rent** 地租 |
| **labour** 劳动 | **wages** 工资 |
| **capital** 资本 | **interest** 利息 |
| **enterprise** 企业家才能 | **profit** 利润 |

- **Division of labour** 劳动分工: splitting a job into small tasks → workers get faster → output per worker rises.
- **Mobility: occupational** 职业流动性 (move to a new *job*) and **geographical** 地理流动性 (move to a new *place*).

**Answer shapes:** AO1 + AO2 + AO3 (analysis) + AO4 (judgement, for evaluate questions).

## 2 Practice

**2.1** State the reward earned by each factor of production. [2]

**2.2** Define the term *division of labour.* [2]

**2.3** State the difference between occupational and geographical mobility. [2]

## 3 Exam-style questions

**3.1** The reward to the factor *capital* is: [1]

- **A** rent
- **B** wages
- **C** interest
- **D** profit

**3.2** Explain two advantages to a firm of using the division of labour. [6]



**3.3** Discuss whether the division of labour always benefits workers. [8]

## Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

**2.1** land → rent; labour → wages; capital → interest; enterprise → profit (2 for all four; 1 for two or three).

**2.2** splitting a production process into separate small tasks, each done repeatedly by a different worker (2 for a clear definition; 1 for a partial idea).

**2.3** occupational mobility is how easily a factor moves to a different job or use; geographical mobility is how easily it moves to a different place (2 for a clear difference; 1 for a partial idea).

**3.1 C**. Capital earns interest.

**3.2** *[6]* For **each** of two advantages: AO1 1 + AO3 up to 2. Example chains — *faster work*: repeating one task → workers become skilled and quick → output per worker rises and unit costs fall. *Less wasted time*: no moving between jobs → more is produced in the same time. Maximum 3 per advantage.

**3.3** *[8]* AO1/AO2/AO3 up to 5 + AO4 up to 3. **Benefits:** higher productivity and pay, and skills built up. **Costs:** boredom and low motivation from repetition, a narrow skill set, and vulnerability if one worker is absent. Judgement: it benefits workers when pay and variety are managed, but repetitive work can harm motivation — it depends on the job design and the workers.





**2** What is meant by the division of labour?

**A** A process is split into a series of individual tasks.

**B** Some workers work part-time and others work full-time.

**C** The same amount of output per hour is produced by each worker.

**D** Wages are divided equally between workers.

A-Level Economics: **w25 14**

**2** Which combination correctly identifies the rewards to each factor of production?

| | capital | enterprise | labour | land |
|---|---|---|---|---|
| **A** | interest | profit | rent | wages |
| **B** | interest | profit | wages | rent |
| **C** | profit | interest | wages | rent |
| **D** | rent | wages | interest | profit |

A-Level Economics: **s25 12**

**4** A country increases its spending on education and training. It pays for this by reducing unemployment benefit payments and increasing taxes on imports of machinery.

What is the likely effect of these changes?

| | human capital | physical capital |
|---|---|---|
| **A** | decreases | decreases |
| **B** | decreases | increases |
| **C** | increases | decreases |
| **D** | increases | increases |

A-Level Economics: **Specimen 1**

**6** What is **not** an example of the role of the factor enterprise in a modern economy?

**A** deciding on new export markets for the firm’s goods and services

**B** making payments to suppliers for raw materials and capital goods

**C** reducing costs through the introduction of a new shift system for employees

**D** transforming the production process with the introduction of technological improvements

# 1.4 Resource allocation in different economic systems

Name: ____________ Class: ________ Date: __________ **Total: 26 marks**

**KEY WORDS** mixed 混合经济 • market economy 市场经济 • incentive 激励 • price mechanism 价格机制 • planned 计划经济

## Objective

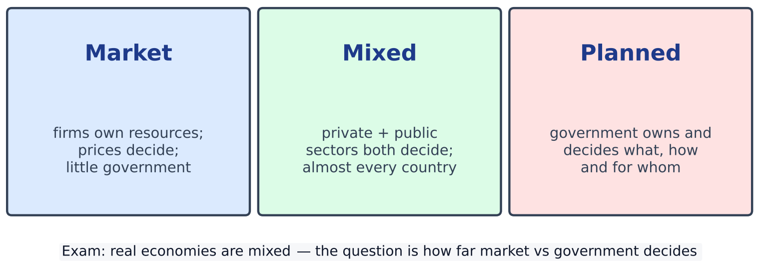
Build the skills to answer exam questions on **resource allocation in different economic systems** 不同经济体制中的资源配置 — **market, planned and mixed** 市场、计划、混合 economies, and the **price mechanism** 价格机制.

**You must be able to:**

- describe market, planned and mixed economies
- explain the three functions of the price mechanism (signalling, incentive, rationing)
- analyse and evaluate the strengths and weaknesses of each system

## 1 Worked examples

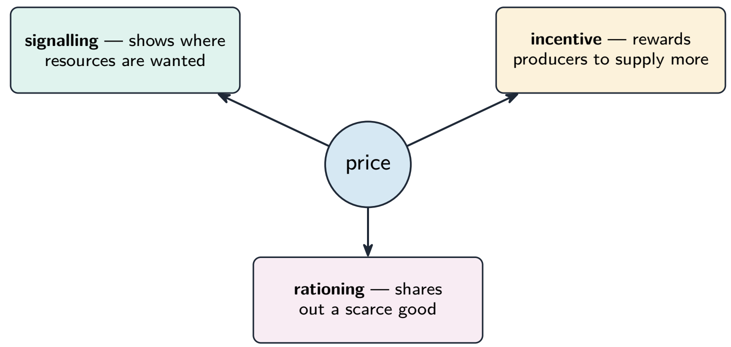
### ■ Systems and the price mechanism




*Market economy ↔ mixed economy ↔ planned (command) economy*

- **Market economy** 市场经济: prices and private owners decide; **planned** 计划经济: the government decides; **mixed** 混合经济: both (almost every real country).
- **Price mechanism** 价格机制 does three jobs: **signalling** 信号 (shows where resources are wanted), **incentive** 激励 (rewards producers to supply more), **rationing** 配给 (shares out a scarce good).






*The price mechanism: signalling, incentive and rationing*

**Answer shapes:** AO1 + AO2 + AO3 (analysis) + AO4 (a supported judgement *in context*).

## 2 Practice

**2.1** Define the term *market economy*. [2]

**2.2** State the three functions of the price mechanism. [3]

**2.3** State one strength and one weakness of a planned economy. [2]

## 3 Exam-style questions

**3.1** In a market economy, a rising price acts as an **incentive** because it: [1]

- **A** signals where resources are wanted
- **B** rewards producers, so they supply more
- **C** shares out a scarce good
- **D** reduces consumer demand

**3.2** Explain how the price mechanism allocates resources in a market economy. [6]



**3.3** Discuss whether a mixed economy allocates resources better than a pure market economy. [12]

## Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

**2.1** an economy in which resources are owned privately and prices, set by demand and supply, decide what is produced (2 for a clear definition; 1 for a partial idea).

**2.2** signalling; incentive; rationing (1 + 1 + 1).

**2.3** strength: smaller gap between rich and poor / key goods provided for all; weakness: weak incentive / shortages and surpluses / slow to change (1 + 1).

**3.1 B**. An incentive rewards producers so they supply more.

**3.2** *[6]* AO1 1–2 + AO3 up to 4 — a rise in demand pushes the price up → the higher price *signals* that the good is wanted and gives producers an *incentive* to supply more → it also *rations* the scarce good to those willing to pay → resources move to where they are most valued.

**3.3** *[12]* AO1/AO2/AO3 up to 8 + AO4 up to 4. **Mixed:** keeps market incentives and choice while the government provides public/merit goods and reduces inequality. **But:** the right balance is hard to find, and too much intervention can weaken incentives. **Pure market:** efficient and innovative, but ignores public goods, externalities and the poor. Judgement: a mixed economy usually allocates resources better because it corrects market failure, but its success depends on how well the government intervenes.





**3** What is **not** a characteristic of a planned economy?

**A** Consumers have limited influence on what is produced.

**B** Profit is the motive for increasing output.

**C** Resources are owned by the government.

**D** There is limited competition in the market.

A-Level Economics: **s25 11**

**5** How can a public good become a private good?

**A** Consumers are dissatisfied with the performance of state-run services.

**B** New technological developments make the good excludable.

**C** The government privatises the industry producing the good.

**D** The price of the good increases so it becomes more profitable.

A-Level Economics: **Specimen 1**

**2** What is likely to be introduced in the market for bus travel if an economy moves from a mixed economy to a market economy?

**A** allowing companies to bid for bus routes

**B** free bus travel for school children

**C** maximum prices for bus travel

**D** subsidies to bus operators

A-LEVEL ECONOMICS • EXERCISE SHEET

# 1.5 Production possibility curves

Name: __________ Class: ________ Date: _________ **Total: 26 marks**

**KEY WORDS** opportunity cost 机会成本 • capital goods 资本品 • consumer goods 消费品 • economic growth 经济增长 • goods 物品

## Objective

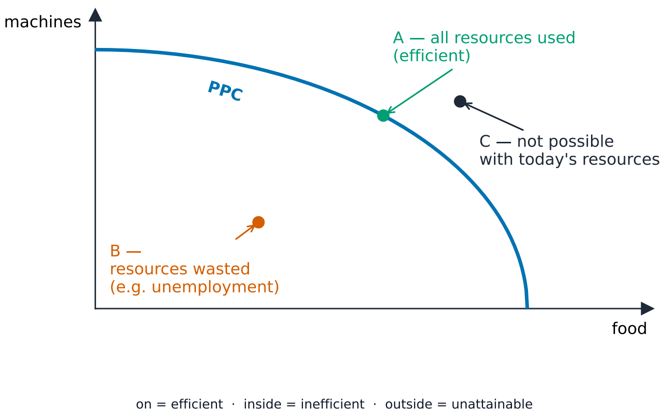
Build the skills to answer exam questions on the **production possibility curve** 生产可能性曲线 (PPC) — points on, inside and outside the curve, **opportunity cost** 机会成本 along it, and **shifts** for growth and decline.

**You must be able to:**

- draw and label a PPC and interpret points on, inside and outside it
- explain opportunity cost and the shape of the curve
- analyse PPC shifts (economic growth, capital vs consumer goods)

## 1 Worked examples

### Reading a PPC

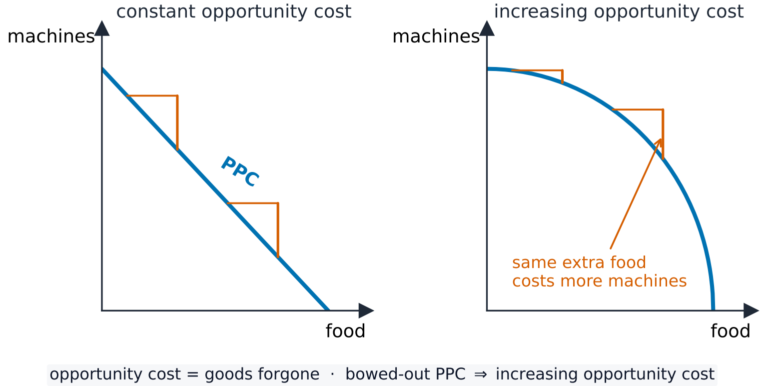



*The PPC shows the maximum output of two goods when resources are fully used*

- **On** the curve: all resources used efficiently. **Inside:** waste (e.g. **unemployment** 失业). **Outside:** impossible today (scarcity).

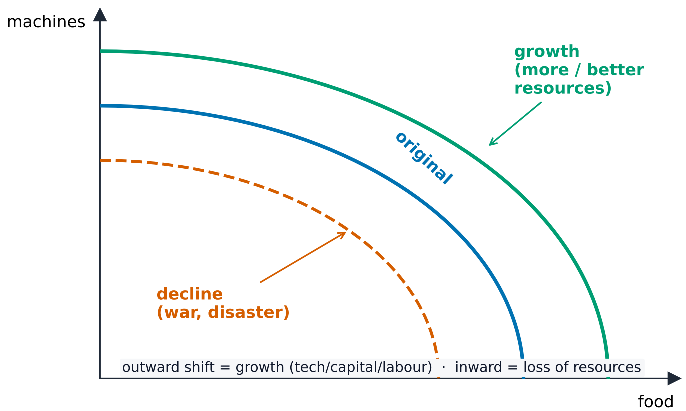


- Moving along the curve shows **opportunity cost** 机会成本 — more of one good means less of the other.
- A **bowed-out** curve = *increasing* opportunity cost; a **straight** curve = *constant* opportunity cost.




*The shape of the PPC shows whether opportunity cost is constant or increasing*

- The whole PPC shifts **outward** for **economic growth** 经济增长 (more/better resources).




*An outward shift of the PPC is economic growth; an inward shift is decline*

**Answer shapes:** an **Explain** [**up to 8**] answer should include a labelled diagram (AO3); **Discuss/Evaluate** [**12**] adds a judgement (AO4).

## 2 Practice

**2.1** State what a point **inside** the PPC shows. [1]

**2.2** Define the term *production possibility curve.* [2]

**2.3** State two causes of an outward shift of the PPC. [2]

## 3 Exam-style questions

**3.1** A point **outside** a country's PPC represents output that is: [1]

- **A** efficient
- **B** wasteful, with unemployment
- **C** not possible with current resources
- **D** the optimum allocation

**3.2** Using a PPC diagram, explain the opportunity cost of a country producing more capital goods. [8]



**3.3** Discuss whether producing more capital goods today is always the best choice for an economy. [12]

## Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

**2.1** that resources are not fully or efficiently used (e.g. unemployment) — the economy could produce more (1).

**2.2** a curve showing the maximum combinations of two goods an economy can produce when all its resources are fully and efficiently used (2 for a clear definition; 1 for a partial idea).

**2.3** any two of: more resources; better resources / new technology; a larger or more skilled workforce (1 + 1).

**3.1 C**. Outside the PPC is unattainable with current resources.

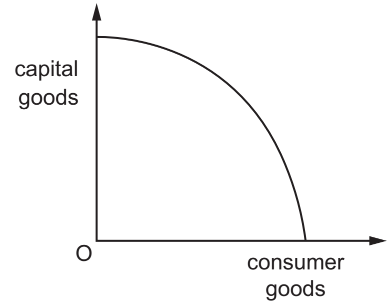
**3.2** *[8]* AO1 1–2 (define PPC/opportunity cost) + **AO3 diagram up to 4** (correctly labelled PPC, axes capital goods vs consumer goods, a movement along the curve) + AO2/AO3 up to 2 — producing more capital goods means moving along the curve, so fewer consumer goods can be made now; that forgone output is the opportunity cost.

**3.3** *[12]* AO1/AO2/AO3 up to 8 + AO4 up to 4. **For:** more capital goods raise future productive capacity → the PPC shifts out further → faster growth and more of both goods later. **Against:** fewer consumer goods now means lower living standards today, which may be hard on a poor population. Judgement: investing in capital goods aids long-run growth, but the best balance depends on current living standards and how urgently people need consumer goods now.





**3** The diagram shows a production possibility curve for an economy that produces capital goods and consumer goods.




Why is the production possibility curve drawn concave to the origin?

**A** Capital goods are a more labour-intensive output than consumer goods.

**B** Consumers always seek to maximise their satisfaction from consumption.

**C** Profit maximisation for firms always ensures efficiency in production.

**D** Some resources are more efficient in production of some goods than others.

**10** What is an example of direct provision by a government?

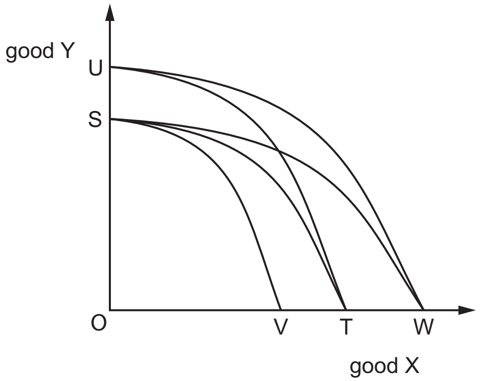
**A** The government introduces a subsidy on renewable fuels to help the environment.

**B** The government introduces a unit tax on cigarettes to discourage consumption.

**C** The government sets a maximum rent on housing to protect tenants.

**D** The government takes over a private library to improve local services.

**5** The diagram shows a production possibility curve (PPC) for a country that produces two goods, X and Y. The initial PPC is given by ST.




What is the effect on the PPC when the productivity of workers producing good X increases?

**A** The PPC shifts from ST to SV.

**B** The PPC shifts from ST to SW.

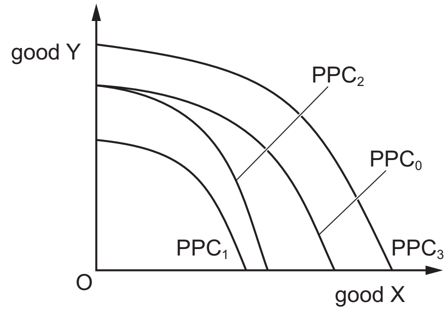
**C** The PPC shifts from ST to UT.

**D** The PPC shifts from ST to UW.





**5** The diagram shows a production possibility curve (PPC) for an economy that produces two goods, X and Y. Both goods require labour to produce. The initial position of the PPC is at $PPC_0$.




What is the effect on the PPC following the emigration of a large number of workers?

**A** the PPC remains at $PPC_0$

**B** the PPC shifts from $PPC_0$ to $PPC_1$

**C** the PPC shifts from $PPC_0$ to $PPC_2$

**D** the PPC shifts from $PPC_0$ to $PPC_3$



**3** **(a)** With the help of a diagram, explain the difference between a movement along a production possibility curve (PPC) and a shift of this curve **and** consider whether a decision to produce more of one product will always incur an equal opportunity cost. [8]

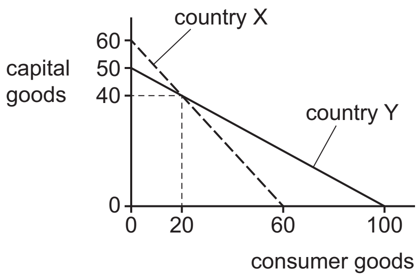
**(b)** Assess the extent to which it is always necessary to increase the size of the labour factor of production in order to cause an outward shift of the production possibility curve. [12]

## Section C

Answer **one** question.

**EITHER**

**2** The diagram shows the production possibility curves of two countries, X and Y.




What can be concluded from the diagram?

**A** Both countries have decreasing opportunity cost in the production of consumer goods.

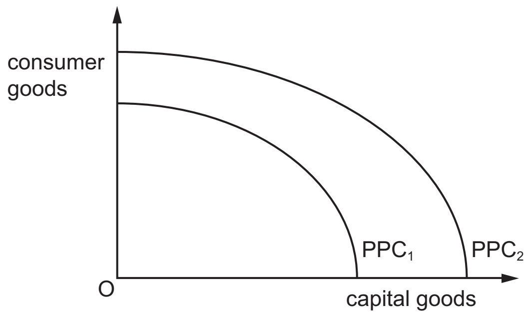
**B** Both countries should produce 40 units of capital goods and 20 units of consumer goods.

**C** Country Y has constant opportunity cost in the production of consumer goods.

**D** Country Y is producing more consumer goods than country X.



**5** The diagram shows an outward shift of the production possibility curve from $PPC_1$ to $PPC_2$.




What could have caused this shift?

**A** a decrease in mineral resources

**B** a decrease in prices of consumer goods

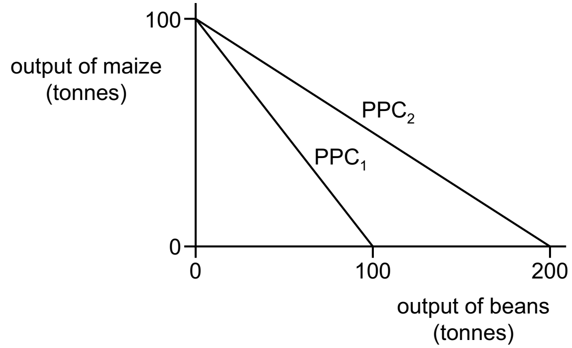
**C** an increase in employment

**D** an increase in technology





**3** The diagram shows that the production possibility curve (PPC) of maize and beans has changed from $PPC_1$ to $PPC_2$.




What has happened to the opportunity cost of maize and the returns to factors producing beans?

| | opportunity cost of maize | returns to factors producing beans |
|---|---|---|
| **A** | fallen | fallen |
| **B** | fallen | risen |
| **C** | risen | fallen |
| **D** | risen | risen |

A-LEVEL ECONOMICS • EXERCISE SHEET

# 1.6 Classification of goods and services

Name: ____________ Class: ________ Date: __________ **Total: 25 marks**

**KEY WORDS** merit good 优值品 • public good 公共物品 • economic good 经济物品 • free good 免费物品 • demerit good 劣值品

## Objective

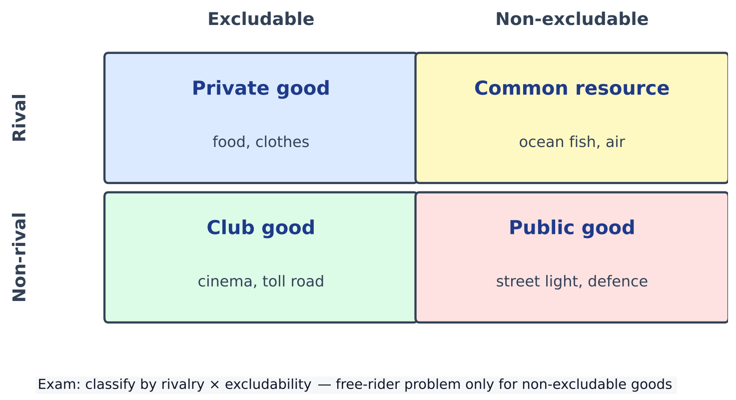
Build the skills to answer exam questions on the **classification of goods and services** 物品与服务的分类 — **free and economic goods** 免费物品与经济物品, **public goods** 公共物品 (and the **free-rider problem** 搭便车问题), and **merit and demerit goods** 优值品与劣值品.

**You must be able to:**

- distinguish free, private, public, merit and demerit goods
- explain **rivalry** 竞争性 and **excludability** 排他性
- explain the free-rider problem and why the government provides public goods

## 1 Worked examples

### Types of good




*Private, club, common-resource and public goods*



- **Private good** 私人物品: has **rivalry** 竞争性 (my use reduces yours) and **excludability** 排他性 (non-payers can be stopped).
- **Public good** 公共物品: **non-rivalry** 非竞争性 + **non-excludability** 非排他性 → the **free-rider problem** 搭便车问题 → private firms won't supply it, so the government does.
- **Merit good** 优值品 (e.g. education): under-consumed; **demerit good** 劣值品 (e.g. cigarettes): over-consumed — both from **information failure** 信息失灵.

**Answer shapes:** AO1 + AO2 + AO3 (analysis) + AO4 (judgement, for evaluate questions).

## 2 Practice

**2.1** Define the term *public good*. [2]

**2.2** State the two features of a private good. [2]

**2.3** State the difference between a *merit* and a *demerit* good. [2]

## 3 Exam-style questions

**3.1** A good that is non-rival and non-excludable is a: [1]

- **A** private good
- **B** merit good
- **C** public good
- **D** free good

**3.2** Explain why the **free-rider problem** means private firms will not supply a public good. [6]

**3.3** Discuss whether the government should provide all merit goods free of charge. [12]



## Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

**2.1** a good that is non-rival (one person's use does not reduce the amount for others) and non-excludable (non-payers cannot be stopped from using it) (2 for both features; 1 for one).

**2.2** rivalry and excludability (1 + 1).

**2.3** a merit good is under-consumed because people undervalue its benefit; a demerit good is over-consumed because people underestimate its harm (2 for a clear difference; 1 for a partial idea).

**3.1 C**. Non-rival and non-excludable defines a public good.

**3.2** *[6]* AO1 1–2 + AO3 up to 4 — because a public good is non-excludable, people can enjoy it without paying (free riders) → a firm cannot make buyers pay → it earns no revenue → it cannot make a profit, so it will not supply the good → the government must provide it.

**3.3** *[12]* AO1/AO2/AO3 up to 8 + AO4 up to 4. **For:** free provision raises consumption of under-consumed merit goods (education, health), giving large external benefits to society. **Against:** it is costly (high opportunity cost and taxes), may be over-used or wasted, and some can afford to pay. Judgement: free provision is justified where external benefits are large and access matters, but full free provision of *all* merit goods may be unaffordable — targeting or subsidies may be better; it depends on the good and the budget.

**4** What is an example of a public good?

**A** A ferry that takes members of the public across a river.

**B** A fish farm that is owned by the government.

**C** A fishing boat that is owned by all members of a village.

**D** A lighthouse that warns boats of dangerous rocks.

A-Level Economics: **w25 14**

**11** What is a characteristic of a public good?

**A** Households cannot accurately value the benefits of a good.

**B** Households cannot be excluded from consuming the good.

**C** The amount of the good available diminishes as households consume it.

**D** Households are rivals in the consumption of the good.

**13** What is an example of direct public provision of goods and services?

**A** a charity hospital funded by public donations that offers free treatment to the rural poor

**B** a mobile government library that travels to rural villages offering access to books

**C** a private-sector pharmacy that provides treatment directly to the public

**D** a private school that offers free places to children of low income families

A-Level Economics: **w25 21**

**3** **(a)** With the help of examples, explain the nature and characteristics of free goods and private goods (economic goods) **and** consider the significance of the distinction between these two types of good. [8]

**(b)** Assess whether education should be classified as a public good or a merit good. [12]

**Section C**

Answer **one** question.

**EITHER**

A-Level Economics: **s25 11**

**3** Which goods are **least** likely to be allocated by market forces in a mixed economy?

**A** hospitals

**B** railways

**C** street lighting

**D** television programmes





**3** What is a statement of the non-rivalrous nature of public goods?

**A** It is not possible to stop a non-payer from using the product.

**B** One person consuming the product does not reduce the amount of it available to others.

**C** People consume too little of the product because they are unaware of its true benefits.

**D** There is an unlimited supply of the product.

**13** Why might governments provide free education for children aged 4 to 16 years old?

**A** Consumers are not fully aware of the benefits of education.

**B** Education in a free market system would be over consumed.

**C** Education is a public good and there would be many free riders.

**D** The private costs of education exceed the private benefits in a free market.

A-Level Economics: **Specimen 1**

**4** An individual buys a ticket to visit a government-owned art gallery.

How would this visit be classified by an economist?

**A** private and demerit good

**B** private and merit good

**C** public and demerit good

**D** public and merit good