A-LEVEL ECONOMICS • EXERCISE SHEET

2.4 The interaction of demand and supply

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

Objective

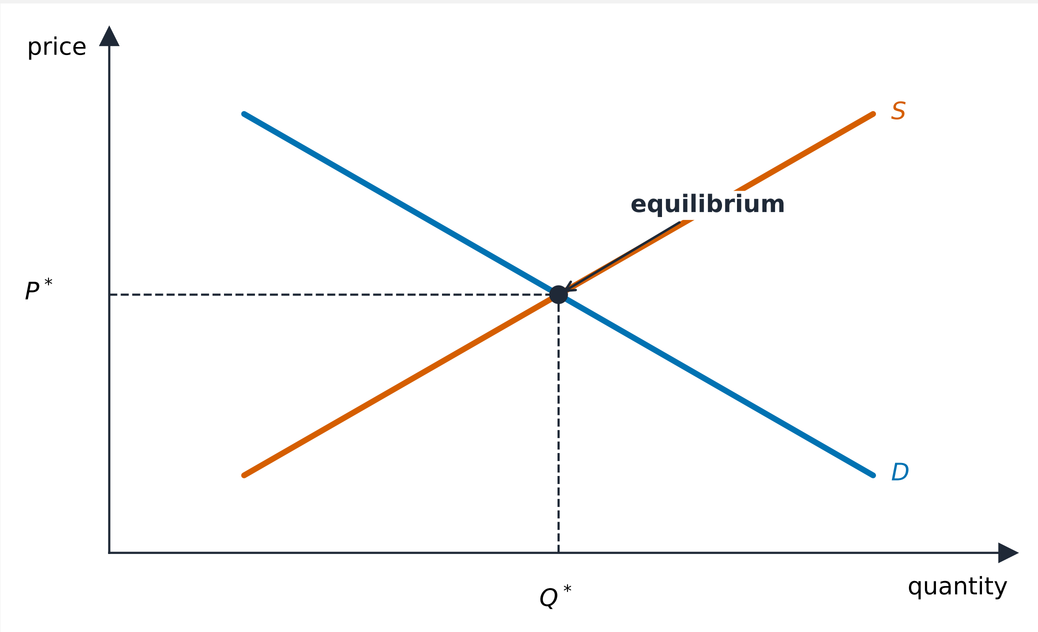
Build the skills to answer exam questions on the **interaction of demand and supply** **需求与供给的互动**—**equilibrium 均衡**, **disequilibrium 非均衡** (excess demand/supply), and how **shifts** change the equilibrium.

You must be able to:

- draw and explain market equilibrium
- explain excess demand (shortage) and excess supply
- analyse how a shift in demand or supply changes price and quantity

1 Worked examples

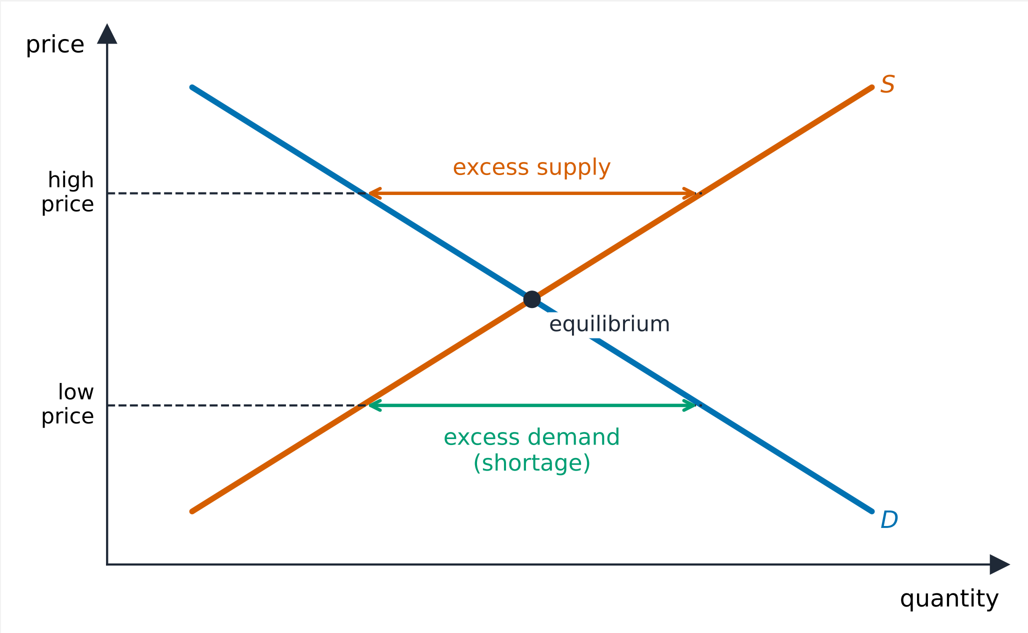
Market equilibrium



Equilibrium P^*, Q^*: quantity demanded = quantity supplied

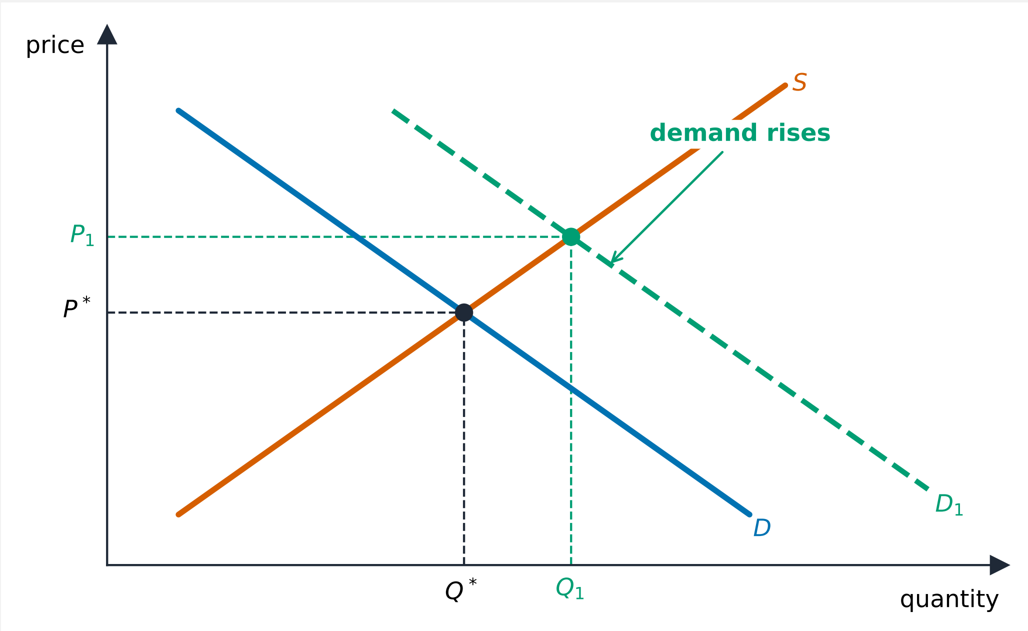
- **Equilibrium 均衡**: where demand crosses supply —no pressure for price to change.

- **Too low a price** → **excess demand** 超额需求 (a shortage) → price pushed up.
- **Too high a price** → **excess supply** 超额供给 → price pushed down.



Disequilibrium: excess supply (above P^*) and excess demand (below P^*)

- **Shifts:** demand right → price ↑, quantity ↑; supply right → price ↓, quantity ↑.



A shift in demand or supply moves the equilibrium

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

2 Practice

2.1 Define the term *equilibrium price*. [2]

2.2 State what happens to price when there is **excess demand**. [1]

2.3 State the effect on equilibrium price and quantity of a rightward shift in supply. [2]

3 Exam-style questions

3.1 A price set **below** the equilibrium price will cause: [1]

- **A** excess supply, pushing price down
- **B** excess demand, pushing price up
- **C** the market to stay in equilibrium
- **D** the supply curve to shift left

3.2 Using a demand and supply diagram, explain how an increase in demand changes the equilibrium price and quantity. [8]

3.3 The price of coffee beans (an input) rises sharply. Discuss the likely effects on the market for coffee. [12]

4 Go further

You are now ready for the real exam questions on this subtopic. Open the **2.4 The interaction of demand and supply** past-paper sheet in the Library, or try these in **Practice mode**:

- 9708/11 N25 —Q12 (equilibrium)
- 9708/12 N25 —Q12 (disequilibrium)
- 9708/12 N25 —Q13 (shifts and equilibrium)

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 price at which the quantity demanded equals the quantity supplied, so there is no pressure for it to change (2 for a clear definition; 1 for a partial idea).

2.2 the price rises (2 for ”rises, because buyers compete for the shortage”; 1 for ”rises”).

2.3 price falls and quantity rises (1 + 1).

3.1 B. Below equilibrium there is excess demand, which pushes the price up.

3.2 *[8]* AO1 1 + **AO3 diagram up to 4** (labelled axes, demand shifts right $D \to D_1$, new equilibrium) + AO2/AO3 up to 3 —higher demand creates excess demand at the old price → the price is bid up → as price rises, quantity supplied rises along the supply curve → a new equilibrium at a higher price and higher quantity.

3.3 *[12]* AO1/AO2/AO3 up to 8 (diagram: supply shifts left, price ↑, quantity ↓) + AO4 up to 4. **Analysis:** dearer beans raise production costs → supply of coffee shifts left → equilibrium price rises and quantity falls; how much depends on PED. **Evaluation:** if demand for coffee is inelastic, the price rises a lot but quantity falls little; producers of complements (e.g. milk) may lose; consumers may switch to substitutes. Judgement: the size of the effect depends on elasticities and whether the cost rise is temporary.