A-LEVEL ECONOMICS • EXERCISE SHEET

7.2 Indifference curves and budget lines

Name: ____________ Class: ________ Date: __________ **Total: 22 marks**

KEY WORDS indifference curve 无差异曲线 • budget line 预算线 • substitution effect 替代效应 • consumer equilibrium 消费者均衡 • income effect 收入效应

Objective

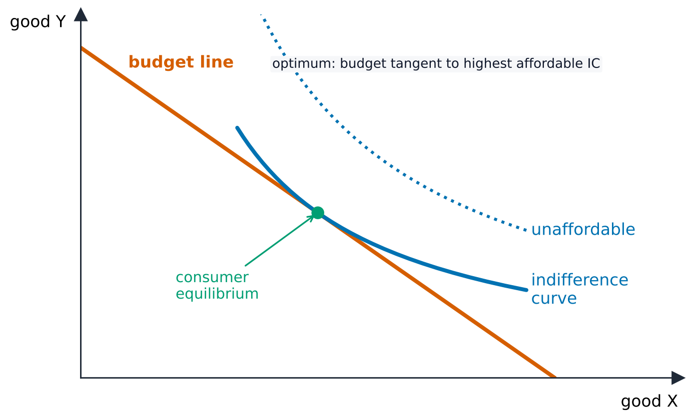
Build the skills to answer exam questions on **indifference curves and budget lines** 无差异曲线与预算线 — **consumer equilibrium** 消费者均衡, and the **income and substitution effects** 收入效应与替代效应.

You must be able to:

- draw an indifference curve and a budget line
- find consumer equilibrium (tangency)
- explain the income and substitution effects (normal, inferior, Giffen goods)

1 Worked examples

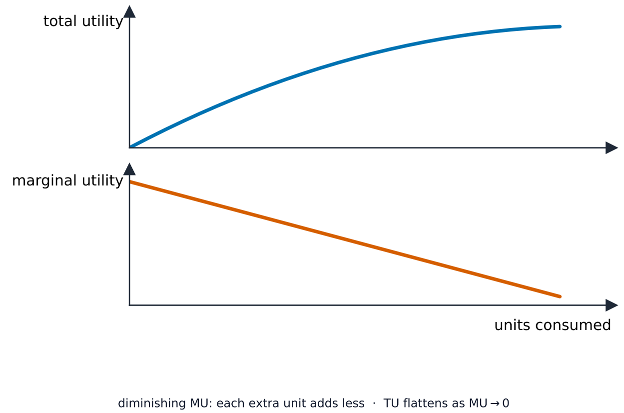
■ Consumer equilibrium



Indifference curve = equal utility; budget line = what is affordable

- **Indifference curve** 无差异曲线: combinations giving the **same** utility (slopes down, bows in).

- **Budget line** 预算线: combinations just affordable; **equilibrium** at the tangency point.
- A price fall raises quantity via two effects: **substitution effect** 替代效应 (switch to the cheaper good) + **income effect** 收入效应 (real income rises).
- **Giffen good** 吉芬品: a strong negative income effect → demand rises as price rises.



Behind the indifference map: diminishing marginal utility is why the curves bow inward

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

2 Practice

2.1 Define the term *indifference curve*. [2]

2.2 State where **consumer equilibrium** occurs on an indifference diagram. [1]

2.3 State the difference between the income effect and the substitution effect. [2]

3 Exam-style questions

3.1 Consumer equilibrium occurs where the budget line is: [1]

A above the highest indifference curve
B tangent to the highest reachable indifference curve
C parallel to the indifference curve
D at the origin

3.2 Using an indifference-curve diagram, explain how a consumer reaches equilibrium. [8]

3.3 Explain, using income and substitution effects, why the demand for a Giffen good slopes upward. [8]