

4.3 Capacity utilisation and outsourcing

Name: _____ Class: _____ Date: _____ **Total: 29 marks**

KEY WORDS capacity 产能 • outsourcing 外包 • capacity utilisation 产能利用率
• supplier 供应商 • over-utilisation 产能过度利用

Objective

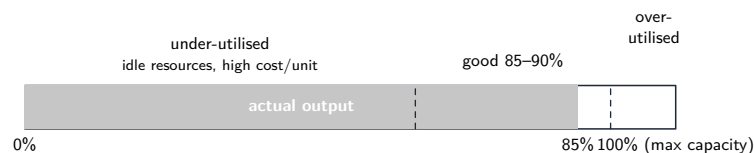
Build the skills to answer exam questions on **capacity utilisation** 产能利用率 and **outsourcing** 外包 — calculating how much of its capacity a firm uses, the problems of under- and over-utilisation, and the trade-offs of outsourcing.

You must be able to:

- calculate **capacity utilisation** and explain a good level
- explain the problems of under- and over-utilisation
- analyse and evaluate the decision to outsource

1 Worked examples

■ Using capacity, and outsourcing



Capacity utilisation: aim for 85-90% — too low wastes resources, too high risks quality



Capacity utilisation shows how much of a firm's possible output it actually makes

$$\text{capacity utilisation} = \frac{\text{actual output}}{\text{maximum possible output}} \times 100\%$$

- **Worked:** actual output 1700, maximum 2000 $\rightarrow \frac{1700}{2000} \times 100 = 85\%$.
- **Under-utilisation:** idle resources $\rightarrow$ high fixed cost per unit. **Over-utilisation** (near 100%): no time for repairs, tired staff, quality may fall. Most firms aim for **85-90%**.
- **Outsourcing:** paying another firm to do work — cheaper and lets the firm focus, but less control of quality.

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

2 Practice

2.1 Define the term *capacity utilisation*. [2]

2.2 A factory's maximum output is 5000 units; it actually makes 4000. Calculate the capacity utilisation. [2]

2.3 Define the term *outsourcing*. [2]

3 Exam-style questions

3.1 Explain one problem for a business of operating at a low level of capacity utilisation.[3]

3.2 Analyse two benefits to a business of **outsourcing** part of its work. [8]

3.3 A business is running close to 100% capacity. Evaluate whether it should **outsource** some of its production. [12]
