

4.1 Production of goods and services

Name: _____ Class: _____ Date: _____

Total: 20 marks**KEY WORDS** production 生产 • batch 批量生产 • inventory 库存 • cost 成本 • technology 技术

Objective

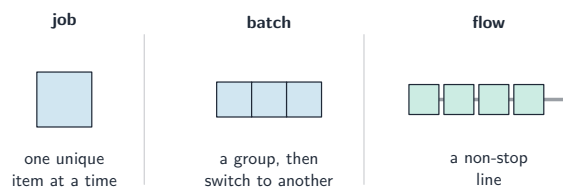
Build the skills to answer exam questions on **production of goods and services** 商品与服务的生产 — the **methods of production** 生产方法 (job, batch, flow), **productivity** 生产率, **lean production** 精益生产 and **just-in-time** 准时制 (JIT).

You must be able to:

- describe job, batch and flow production
- explain productivity and how to raise it
- explain lean production and JIT inventory

1 Worked examples

■ Methods of production



Job (one item), batch (a group), flow (non-stop)

- **Job** 单件生产: one item to order (a wedding cake). **Batch** 批量生产: a group, then switch. **Flow** 流水线生产: non-stop line (cars) — low unit cost but needs high demand.
- **Productivity** 生产率: output per worker/machine; raise it by training, technology, motivation.
- **JIT** 准时制: materials arrive as needed → little **inventory** 库存 → low storage cost, but a late delivery stops production.

Answer shapes: K + App + An + Ev (a justified judgement, for “do you think” questions).

2 Practice

2.1 Define the term *productivity*.

[2]

2.2 State the difference between *job* and *flow* production.

[2]

2.3 Define the term *just-in-time (JIT)*.

[2]

3 Exam-style questions

3.1 Identify two ways a business could raise its productivity.

[2]

3.2 Explain two benefits to a manufacturer of using flow production.

[6]

3.3 A furniture maker produces special, made-to-order pieces. Do you think it should switch to flow production? Justify your answer. [6]

Solutions

IGCSE Business answers are marked by **level of response**: award **K** knowledge, **App** application, **An** analysis and **Ev** a justified judgement.

2.1 how much output each worker or machine produces in a set time (2 for a clear definition; 1 for a partial idea).

2.2 job production makes one item at a time to order; flow production makes goods non-stop on a moving line (2 for a clear difference; 1 for a partial idea).

2.3 a system where materials arrive just as they are needed, so very little inventory is held (2 for a clear definition; 1 for a partial idea).

3.1 any two of: train workers; use better machines/technology; improve motivation; organise work better (1 + 1).

3.2 [6] For **each** of two benefits: K 1 + An up to 2 — e.g. *low unit cost*: machines run non-stop making many identical units → economies of scale → low cost per item. *Consistent quality*: a standard line → every unit is the same → fewer faults. Maximum 3 each.

3.3 [6] Both sides + judgement. **For**: flow production lowers the unit cost and raises output. **Against**: flow production makes identical goods, but this maker sells *special, made-to-order* pieces, so job production fits its product; flow lines are costly to set up and remove the custom appeal. **Judgement (Ev)**: the maker should keep job production because its product is custom — flow production only suits high, steady demand for identical goods.