

5.16 Aquaculture

Name: _____ Class: _____ Date: _____

Total: 10 marks**KEY WORDS** aquaculture 水产养殖 • overfishing 过度捕捞 • eutrophication 富营养化

Objective

Build the skills to answer exam questions on **aquaculture**.

You must be able to:

- describe **aquaculture** 水产养殖 and its benefits
- explain its environmental impacts (waste, disease, escapees)
- weigh it against wild-caught fishing

1 Worked examples

Study these first. Each one shows the method for a question type used later — follow the steps and you can do the Practice and Exam-style questions yourself.

■ What aquaculture is

Aquaculture is farming aquatic organisms (fish, shrimp, shellfish). It can take pressure off **wild** stocks and provide protein efficiently.

■ Benefits

- Relieves **overfishing** of wild populations.
- High yield of protein in a small area.

■ Impacts

- **Waste and excess feed** pollute nearby water (nutrients → eutrophication).
- **Disease and parasites** spread in crowded pens and can infect wild fish.
- **Escapees** can become invasive or interbreed with wild fish.
- Coastal habitat (mangroves) may be cleared for ponds.

■ A worked judgement

A shrimp farm built by clearing mangroves relieves wild fishing pressure but destroys valuable coastal habitat and pollutes local water — a trade-off.

2 Practice

Now apply the methods above.

2.1 What is aquaculture? [1]

2.2 State one benefit of aquaculture. [1]

2.3 State one environmental impact of aquaculture. [1]

3 Exam-style questions

3.1 One environmental problem with fish farming is [1]

A	B
C	D

A it eliminates all pollution

B waste and disease can affect nearby waters

C it increases wild fish stocks directly

D it uses no feed

3.2 A coastal region builds fish farms.

(a) Explain one benefit and one drawback. [2]

(b) Explain how escaped farmed fish could harm wild populations. [2]

3.3 Explain why crowding in fish pens increases disease risk. [2]