

5.17 Sustainable Forestry

Name: _____ Class: _____ Date: _____

Total: 9 marks

KEY WORDS selective cutting 择伐 • clearcutting 皆伐 • erosion 侵蚀

Objective

Build the skills to answer exam questions on **sustainable forestry**.

You must be able to:

- describe sustainable practices (**selective cutting** 择伐, replanting, rotation)
- explain how they maintain forest function
- contrast with clearcutting

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.

■ Sustainable forestry

Sustainable forestry harvests timber while keeping the forest healthy and productive for the future:

- **Selective cutting** — remove only some trees, leaving the forest largely intact.
- **Replanting** — replace harvested trees.
- **Rotation** — harvest no faster than the forest regrows (sustainable yield).

■ Keeping forest function

Leaving trees standing maintains **habitat**, **soil stability**, **carbon storage**, and the **water cycle**, unlike clearcutting.

■ Certification

Certification programs label sustainably-harvested wood so consumers can support responsible forestry.

■ A worked contrast

Selective cutting keeps the forest canopy and roots, so it avoids the erosion, habitat loss, and flooding caused by clearcutting.

2 Practice

Now apply the methods above.

2.1 Name one sustainable forestry practice. [1]

2.2 Why is replanting important? [1]

2.3 How does selective cutting protect soil? [1]

3 Exam-style questions

3.1 Sustainable forestry harvests trees [1]

A	B
C	D

A faster than they regrow

B no faster than they regrow

C only by clearcutting

D never

3.2 A company switches from clearcutting to selective cutting and replanting.

(a) Explain two environmental benefits. [2]

(b) State one disadvantage compared with clearcutting. [1]

3.3 Explain how sustainable forestry maintains a forest's carbon storage. [2]