InkBiology

QUESTION WORKBOOK

Succession: how bare rock becomes woodland, and why we stop it

Ecology, populations and environmental change · Unit B20

AQA 3.7.4 · OCR A 6.3.2 · Edexcel A Topic 5 · CAIE 18.1

6 questions · 21 marks

PRINT EDITION

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SECTION A · Short, 1 to 2 marks

A1 State what is meant by a pioneer species, and state what pioneers do to a bare surface. [2]

SECTION B · Standard, 3 to 5 marks

B1 A moorland has been monitored at the same twelve sites since 1975. Over that period the nitrogen deposited from the air has risen and the number of plant species per square metre has fallen. A report concludes that nitrogen deposition caused the loss of species. Evaluate that conclusion. [5]

B2 Explain why the community occupying a bare rock surface changes in a predictable direction rather than at random. [4]

B3 Explain what a plagioclimax is, and explain why a nature reserve on chalk downland is grazed rather than fenced and left alone. [4]

B4 Explain why secondary succession on an abandoned field reaches woodland far sooner than primary succession on bare rock. [3]

B5 A chalk grassland held 38 plant species per square metre while it was grazed. Twenty-six years after grazing stopped it held 12 species per square metre. Calculate the percentage decrease in the number of species per square metre. [3]