

Exercise walk-through

Environmental Consequences of Connectivity ■ 2.6

eXercise

You must be able to

- state what the CED says diffused along trade routes
- explain why crops and pathogens appear in one sentence
- name the disease the CED specifies
- explain why this is the unit's least intended consequence

Method — What diffused

There was **continued diffusion of crops and pathogens**, with epidemic diseases, including the bubonic plague, along trade routes.

Method — One sentence, two effects

A route that carries a crop carries a pathogen. The CED puts them together because they travel by the same mechanism, with opposite consequences for the population.

Method — The disease

The bubonic plague is the CED's named example — a consequence of connection that no participant in the network wanted or foresaw.

Method — Unintended

Every other consequence in unit 2 was sought by someone: merchants wanted profit, empires wanted revenue, travellers wanted knowledge. This one was sought by nobody, which is why it belongs in a unit about networks rather than about intentions.

Practice 2.1 ■ 2 marks

State what the CED says diffused along trade routes.

Solution 2.1

Method: What diffused

Worked steps

crops and pathogens **B1**, with epidemic diseases including the bubonic plague **B1**.

Practice 2.2 ■ 2 marks

Explain why crops and pathogens appear together.

Solution 2.2

Method: What diffused

Worked steps

a route carrying a crop carries a pathogen **B1**; they travel by the same mechanism with opposite consequences **B1**.

Practice 2.3 ■ 2 marks

This consequence was intended by nobody.

- (a) State what everyone else in unit 2 sought.
- (b) State why this one still belongs in the unit.

Solution 2.3

Method: Unintended

Worked steps

(a) merchants sought profit; empires sought revenue; travellers sought knowledge **B2**. (b) the unit is about what networks do, not what participants intend **B1**.

Exam-style 3.1 ■ 1 mark

The CED's named epidemic disease is

- A** smallpox
- B** the bubonic plague
- C** malaria
- D** cholera

Solution 3.1

Method: The disease

A smallpox

B the bubonic plague



C malaria

D cholera

Worked steps

B. the CED names it.

Exam-style 3.2 ■ 1 mark

Crops and pathogens travelled by

A different mechanisms

B the same mechanism

C no mechanism

D deliberate transport only

Solution 3.2

Method: What diffused

- A different mechanisms
- B the same mechanism**
- C no mechanism
- D deliberate transport only



Worked steps

- B. the same routes and vessels.**

Exam-style 3.3 ■ 1 mark

A network built to move goods also moves a disease.

- (a) State what this shows about networks.
- (b) Explain why the consequence cannot be designed out.

Solution 3.3

Worked steps

(a) that their effects exceed their purpose **B1**. (b) the carriage of goods and of pathogens use the same ships, roads and people **B1**, so one cannot be permitted and the other refused **B1**.