8.6 Impacts of Water Insecurity: Disease, Pollution and Conflict: 10-minute Pack

AQA 8035 · Calculators not allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Give one example of a waterborne disease caused by contaminated drinking water and name a typical symptom, context: low-income urban area with informal water supplies.

(Total for Question 1 is 1 mark)

2 Describe one direct health impact of drinking water contaminated with sewage in a rural village that relies on shallow wells.

(Total for Question 2 is 2 marks)

3 Give one impact of contaminated water on local education in a town that relies on informal wells and springs.

(Total for Question 3 is 1 mark)

4 Give two ways that industrial pollution can harm freshwater ecosystems downstream of a factory discharge point.

(Total for Question 4 is 2 marks)

© Revision Library | revisionlibrary.co.uk

5 Describe how agricultural runoff containing fertiliser can lead to algal blooms in a lake, and give one environmental consequence of such blooms for fisheries.

(Total for Question 5 is 2 marks)

6 Explain one economic impact on local businesses when a coastal resort is affected by river pollution that discolours water and creates odour, context: small seaside town dependent on day-trip tourism.

(Total for Question 6 is 2 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 8.6 Impacts of Water Insecurity: Disease, Pollution and Conflict: 10-minute Pack

Question 1

one named disease and one typical symptom, e.g. cholera, severe watery diarrhoea **B1**

Answer: Cholera, symptom: severe watery diarrhoea.

Question 2

identification of a health impact, e.g. increased diarrhoeal disease or typhoid outbreaks **B1**

linked detail explaining consequence, e.g. diarrhoea causes dehydration and malnutrition, increasing child mortality or long-term ill health **B1**

Answer: Contaminated well water can cause diarrhoeal disease outbreaks, leading to dehydration and malnutrition which can increase child mortality and long-term health problems.

Question 3

one impact on education, e.g. increased pupil absenteeism due to waterborne illness **B1**

Answer: Increased pupil absenteeism because children are frequently ill from waterborne diseases.

Question 4

first valid way, e.g. toxic chemicals kill fish and invertebrates **B1**

second valid way, e.g. pollutants bioaccumulate in food chains or cause habitat degradation reducing biodiversity **B1**

Answer: Toxic chemicals can kill fish and aquatic invertebrates; pollutants can bioaccumulate in food chains or degrade habitats, reducing biodiversity.

Question 5

description of process, e.g. fertiliser nutrients (nitrate and phosphate) enter water causing rapid algal growth (eutrophication) **B1**

environmental consequence for fisheries, e.g. algae decay uses up oxygen causing fish kills and reduced catches **B1**

Answer: Fertiliser nutrients washed into the lake cause rapid algal growth (eutrophication); when algae die and decompose they use oxygen, causing fish kills and reduced fish catches.

Question 6

identification of economic impact, e.g. drop in visitor numbers or cancellations **B1**

linked explanation, e.g. fewer tourists reduce revenue for hotels, cafes and shops, leading to loss of income and potential job losses in the local economy **B1**

Answer: A visible and smelly polluted river deters visitors, causing a drop in day-trip tourists; this reduces revenue for cafes, shops and boat operators and can lead to staff being laid off and lower local income.

© Revision Library | revisionlibrary.co.uk