8.7 Strategies to Increase Water Supply: Transfer, Dams and Local Schemes: 10-minute Pack

AQA 8035 · Calculators not allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Define the term 'water transfer scheme' as used in planning regional water supplies.

(Total for Question 1 is 1 mark)

2 State ONE environmental impact caused by creating a large reservoir for water supply.

(Total for Question 2 is 1 mark)

3 Give ONE social benefit that a large-scale inter-regional water transfer scheme can bring to the receiving urban area.

(Total for Question 3 is 1 mark)

4 Describe ONE advantage of building a large dam and reservoir to increase water supply for a region.

(Total for Question 4 is 2 marks)

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5 Suggest TWO ways in which solar-powered pumps improve rural access to groundwater for small-scale water schemes in sunny low-income regions.

(Total for Question 5 is 2 marks)

6 Explain ONE political or social reason why large-scale water transfers can be controversial between regions or countries.

(Total for Question 6 is 3 marks)

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Mark scheme · 8.7 Strategies to Increase Water Supply: Transfer, Dams and Local Schemes: 10-minute Pack

Question 1

a scheme that moves water from an area of surplus to an area of deficit, using canals, pipelines, tunnels or pumped systems, oe **B1**

Answer: A water transfer scheme moves water from an area of surplus to an area of deficit using canals, pipelines, tunnels or pumps.

Question 2

any correct environmental impact, e.g. habitat loss and flooding of ecosystems, oe **B1**

Answer: Loss of habitat and flooding of ecosystems where the reservoir is formed.

Question 3

one social benefit, e.g. improved domestic water supply allowing better public health and hygiene, oe **B1**

Answer: Improved domestic water supply, which can lead to better public health and hygiene for the urban population.

Question 4

one advantage named, e.g. stores large volumes of water for supply in dry periods, oe **B1**

linked detail, e.g. reservoir water can be released to maintain river flow and support agriculture and urban demand during droughts, oe **B1**

Answer: A dam and reservoir can store large volumes of water for use in dry periods, allowing controlled releases to maintain river flow and supply agriculture and cities during droughts.

Question 5

way 1, e.g. provide reliable pumping without diesel or grid electricity, reducing fuel costs, oe **B1**

way 2, e.g. lower running costs and easier maintenance can make wells more sustainable for communities, oe **B1**

Answer: Solar pumps provide reliable pumping without diesel or grid power, reducing fuel costs, and their lower running costs and simple maintenance make wells more sustainable for communities.

Question 6

reason stated, e.g. source communities may lose water and feel the scheme is unfair, oe **B1**

linked detail, e.g. reduced water supply downstream can harm agriculture, livelihoods and lead to protests, oe **B1**

governance detail, e.g. disputes over allocation and perceived inequity can strain relations between regions or countries, oe **B1**

Answer: Source communities may lose water and see the transfer as unfair; reduced downstream supply can harm agriculture and livelihoods and cause protests, and disputes over allocation can strain relations between regions or countries.

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