1.23 Public Goods and the Free-Rider Problem: Test Pack

Total Marks

AQA 7136 · Calculators not allowed · about 15 minutes

Name: _____ Date: ____ / ____ / _____

Answer all questions. Full sentences are required for questions worth 3 marks or more and for the 12-mark question. Time guidance: 15 minutes for the whole pack.

1 Define the economic term 'non-excludability' in the context of public goods, using the example of national defence in the United Kingdom.

(Total for Question 1 is 2 marks)

2 State whether each of the following is typically a private good, a pure public good, or a quasi-public good: (i) a paid private gym membership, (ii) national defence, (iii) a toll road where only users who pay can drive on it.

(Total for Question 2 is 3 marks)

© Revision Library | revisionlibrary.co.uk

3 Explain briefly why quasi-public goods may be provided by private firms whereas pure public goods usually are not, using the example of a concert in a fenced venue compared with national weather radar services.

(Total for Question 3 is 2 marks)

4 Explain how a toll road is an example of a quasi-public good, and identify one way congestion can change its characteristic.

(Total for Question 4 is 3 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 1.23 Public Goods and the Free-Rider Problem: Test Pack

Question 1

a statement that non-excludability means it is difficult or impossible to prevent people who do not pay from enjoying the good	**B1**
example link: once national defence is provided, all residents benefit whether they contributed or not	**B1**

Answer: Non-excludability means people cannot be prevented from benefiting from a good if it is provided; for national defence everyone in the country gains protection whether or not they paid for it.

Question 2

(i) private gym membership = private good	**B1**
(ii) national defence = pure public good	**B1**
(iii) toll road = quasi-public good (excludable but non-rival up to congestion)	**B1**

Answer: (i) private good; (ii) pure public good; (iii) quasi-public good (excludable, may be non-rival until congested).

Question 3

quasi-public goods are excludable, so firms can charge users directly (e.g. fence and ticket a concert), allowing cost recovery	**M1**
pure public goods are non-excludable so private firms cannot prevent non-payers from benefiting and thus cannot recoup costs (e.g. national weather radar provides information to all)	**M1**

Answer: Quasi-public goods can be made excludable so firms can charge users and recover costs, as with a ticketed concert, while pure public goods like national weather radar are non-excludable so private firms cannot prevent non-payers from benefiting and cannot recoup costs.

Question 4

explains that a toll road is excludable because users who do not pay can be prevented from using it	**M1**
explains that a toll road can be non-rival when traffic is light because one user's driving does not reduce another's ability to drive	**M1**
states that when congestion is high the road becomes rival, reducing the benefit per additional user	**A1**

Answer: A toll road is excludable since non-payers can be kept off, and it may be non-rival when traffic is light; however, with heavy congestion it becomes rival because extra vehicles reduce other drivers' speed and utility.

© Revision Library | revisionlibrary.co.uk