3.2 Public goods and the market's inability to achieve equity

Name: _____ Class: _____ Date: _____ **Total: 26 marks**

KEY WORDS public good • non-rivalrous • non-excludable • free rider problem • equity • transfer payment

Objective

Build the skills to answer exam questions on **public goods**, the **free rider problem**, and why markets may not achieve **equity**.

You must be able to:

- explain the characteristics of public goods and the free rider problem
- explain why governments provide public goods, and the problems of doing so
- explain why market outcomes may be inequitable
- evaluate policies that make markets fairer

1 Key knowledge and worked examples

■ Public goods and equity

A **public good** is **non-rivalrous** (one person's use does not reduce another's) and **non-excludable** (people cannot be stopped from using it). Examples: national defence, street lighting, flood barriers, lighthouses.

type of good	rivalrous?	excludable?	example
private good	yes	yes	a sandwich
public good	no	no	street lighting
common pool resource	yes	no	fish in the sea
club good	no (until crowded)	yes	a toll road, streaming service

Free rider problem: because people can use a public good without paying, they have no reason to pay for it. Private firms cannot earn revenue, so the good is **not provided** by the market at all: a "missing market".

Solutions: government provision paid from taxes; **contracting out** to private firms; in some cases, technology makes exclusion possible (e.g. pay TV). Problems: the government must estimate how much people value the good, it has an opportunity cost, and it may be inefficient.

Equity means fairness; **equality** means sameness. The market allocates goods by **ability to pay**, so people with low income and wealth may not get basic goods (housing, healthcare, education), even when they need them. Market incomes depend on skills, inheritance, health and luck, so they can be very unequal.

Policies for equity: progressive taxes; **transfer payments** (pensions, unemployment benefits); provision of **merit goods** free or cheaply (schools, clinics); minimum wages; subsidized housing. Each has costs: less incentive to work or invest (possibly), administrative cost, opportunity cost.

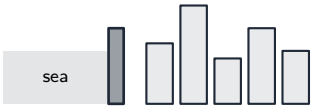
Answer shapes: name the characteristic → apply to the good → explain the market's result → evaluate the government's response.

2 Practice

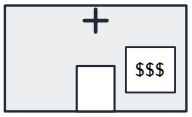
2.1 Distinguish between **non-rivalry** and **non-excludability**. [2]



2.2 Explain why a flood barrier protecting a city is unlikely to be provided by a private firm. [2]

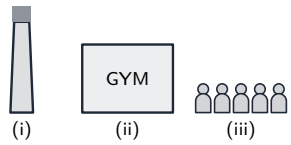


2.3 Explain **two** reasons why a free market may not achieve an equitable distribution of healthcare. [4]

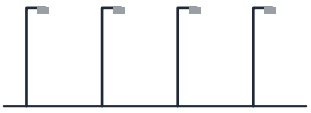


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2.4 Classify each as a private good, public good, common pool resource or club good, with a reason: **(i)** a lighthouse; **(ii)** a gym with a membership fee; **(iii)** a city park's free grass area during a festival. [3]



2.5 A government spends $45 million a year on street lighting for 1.5 million people. Calculate the cost per person, and explain why this cost is not the same as the benefit people receive. [3]

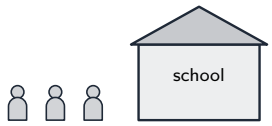


3 Exam-style questions

3.1 Many countries provide primary schooling free of charge.

(a) Define **equity**. [2]

(b) Evaluate free provision of schooling as a way to make the economy more equitable. [6]



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3.2 A government contracts a private firm to build and run a toll-free motorway, paying it from taxes.

Explain **two** advantages and **one** disadvantage of contracting out the provision of a public good. [4]

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