

## 2.1 Choice, models and market adjustment / Elasticity, welfare and policy

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_ **Total: 6 marks**

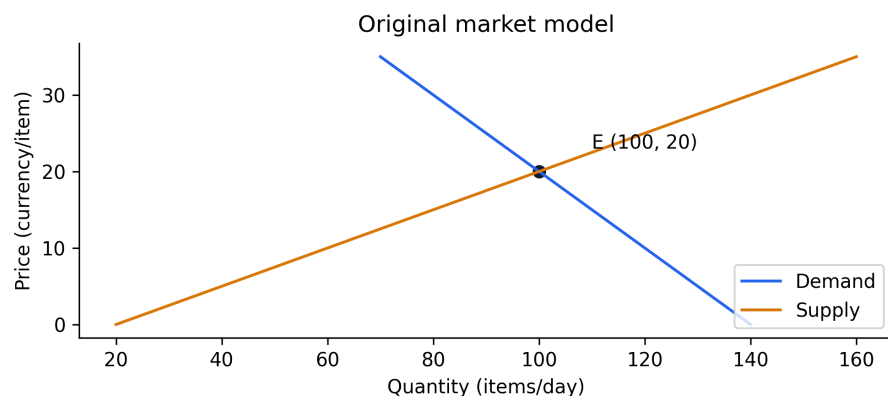
**KEY WORDS** scarcity • opportunity cost • equilibrium  
 • excess demand • elasticity • tax incidence • external cost  
 • welfare

### Objective

Apply the supported native methods to original data and justify a qualified transfer conclusion.

### 1 Key knowledge and worked examples

Percentage changes need a stated convention. PED uses quantity demanded and own price on the same demand relation; PES uses quantity supplied. YED and cross-price elasticity compare different determinants. A unit tax creates a price wedge; relative responsiveness shapes burden. An externality concerns third-party costs/benefits, not merely an expensive transaction. Public goods and information failure have different mechanisms.



An original market's pre-tax price is 10. After a unit tax, consumers pay 12 and producers receive 9. Calculate the wedge and burden, then qualify a welfare claim.

Tax per item=consumer price–producer receipt=12–9=3 currency units/item. Consumer burden=12–10=2 units/item; producer burden=10–9=1 unit/item. The stated burden split concerns this equilibrium, not a universal tax rule. Tax revenue=tax per item×post-tax quantity; that quantity must be known. Revenue is a transfer, while welfare effects require changes in surplus, resource use and any external harm. A corrective tax can reduce inefficient overproduction, but only with the relevant external-cost model and evidence. Collection cost, evasion and access matter.

### 2 Practice

2.1 For the worked case, state the method, show its application and give a limitation.[3]

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### 3 Exam-style questions

3.1 A subsidy expands a product with an unpriced external cost. Is greater output necessarily a welfare gain? Compare a better-targeted policy. [3]

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## Solutions

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**2.1** Tax per item=consumer price–producer receipt= $12-9=3$  currency units/item. Consumer burden= $12-10=2$  units/item; producer burden= $10-9=1$  unit/item. The stated burden split concerns this equilibrium, not a universal tax rule. Tax revenue=tax per item $\times$ post-tax quantity; that quantity must be known. Revenue is a transfer, while welfare effects require changes in surplus, resource use and any external harm. A corrective tax can reduce inefficient overproduction, but only with the relevant external-cost model and evidence. Collection cost, evasion and access matter. Authored points for method, application and relevant qualification.

**3.1** Greater output can increase external harm even if consumers and producers gain privately. Identify marginal social/private costs and the efficient versus market quantity before judging. A targeted charge or standard may address the harm more directly, subject to measurement, enforcement and distribution. A subsidy for a cleaner alternative might help through a different mechanism; its fiscal and behavioural effects still need evaluation. IGCSE pupils use the supported private/external/social distinction; detailed marginal welfare geometry belongs only where the course's mapped outcomes authorize it. Authored points for judgement, case-linked reasoning and justified qualification. Accept supported alternatives.