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Answers

Exam-style questions

Questions on demerit goods

David Horner

This resource provides answers to the questions posed in the Exam-Style Questions column, in the September 2025 issue of ECONOMIC REVIEW.

Question 1

A tax on junk food of £0.30 on a typical burger costing £2.50 is estimated to reduce demand by 3.5%. Calculate the price elasticity of demand for this item of junk food to one decimal place. (2 marks)

Answer

$(2.50 + 0.3) / 2.50 \times 100 = 12\%$ rise in price. Therefore $PED = -3.5 / +12 = -0.3$

Question 2

Using Table 1, to what extent do the data show that the demand for beer is likely to be a luxury good. (4 marks)

Answer

Relevant points include:

- Luxury goods are ones with high positive income elasticity.
- We would expect the demand for the product to rise along with income.
- Demand should rise faster than income.
- Over period, demand has risen by 28% whereas income has risen by 21%.
- YED for period is $28 / 21 = 1.33$.
- This confirms there is some evidence that beer is a luxury good.
- In every single year, apart from 2019 and 2022, demand rises faster than income.

Question 3

With the help of a diagram, show how an indirect tax would affect consumer and producer surplus in the market for tobacco. (9 marks)

Answer

Relevant points include:

- Definitions of consumer and producer surplus, as well as welfare loss.
- Diagrams – demand and supply diagram with, ideally, inelastic demand for junk food.
- Indirect tax (either unit or ad valorem) would shift supply curve to the left.
- New equilibrium would be at a higher price and lower quantity.
- Consumer surplus would be reduced, so would producer surplus
- Tax revenue collected would be the vertical difference between the two supply curves (the original curve and the one with the tax) at the new equilibrium multiplied by the new equilibrium quantity.
- Welfare loss now exists.
- Answer may focus on how the tax revenue is used will help determine to the extent to which society 'loses'.

Question 4

Evaluate the extent to which a minimum price on alcohol is the best solution to the market failure created by its overconsumption of alcohol. (25 marks)

Answer

Possible issues to include:

- Definitions of minimum price.
- How minimum price leads to a higher price in market which leads to lower quantity demanded.
- How minimum prices for alcohol can target the cheaper end of the market for alcohol and not push up prices at 'premium' end of the market.
- Problems with the minimum price – oversupply, unintended consequences (switching to more dangerous alternatives), inelastic demand.
- Alternative policies may be better: education, taxes, subsidies for substitutes.
- Diagrams for minimum price – and other policies used to correct the market failure.

Issues for evaluation:

- Depends on whether there are alternatives that consumers can switch to.
- The cost of the policy may be lower than other policies.
- Education may be more important due to price elastic demand.

- Taxation would generate revenue which could be used to solve the problem of overconsumption (e.g. a public awareness campaign of the dangers of alcohol consumption).
- A combination of policies is probably the best approach.
- Difficulties of measuring the true cost of the overconsumption – NHS estimates are reasonably useful though.