

**Economics Unit 1 Exam Semester 1 2019**

**Marking Guide**

**Section 1 (24 marks)**

1 C

2 B

3 A

4 B

5 C

6 D

7 D

8 C

9 A

10 D

11 D

12 A

13 C

14 B

15 B

16 C

17 D

18 B

19 A

20 B

21 A

22 C

23 D

24 A

**Section 2 (36 marks)**

**Question 25 (12 marks)**

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| a. i D/S diagram – D & S curves correctly drawn & labelled showing equilibrium at $4 & 4 million  ii. Producers’ revenue = $16 million | 1-2 marks  1 mark |
| b. There has been a decrease in demand  Caused by a change in preferences (consumers react negatively to the needle scare)  Correctly drawn diagram showing the decrease in demand – equilibrium price & qty both decreasing | 1 mark  1 mark  1-2 marks |
| c. There will be a decrease in supply – the S curve will shift left  This will cause equilibrium price to rise & qty to fall  Diagram showing decrease in supply  Change in producer revenue is uncertain – it depends on price elasticity of demand – it may increase if D is inelastic or decrease if D is elastic | 1 mark  1 mark  1 mark  1-2 marks |

**Question 26 (12 marks)**

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| a. Price elasticity of demand measures the responsiveness of qty demanded to a change in price | 1 mark |
| b. P1 = 1000; P2 = $1100; Q1 = 9200; Q2 = 8000  Simple formula: change in Q/Q x P/change in P  1200/9200 x 1000/100 = 1.3  Midpoint formula: 1200/8600 x 1050/100 = 1.465  Note: can use either method | 1-2 marks |
| c. i. Missing values: $9.2 million; $8.8 million (need both)  ii. $1000  iii. Between $800 - $1000: price **inelastic**  Between $1000 - $1200: price **elastic**  When price rises from $800 to $1000, total revenue rises which means that D is inelastic; when price rises from $1000 to $1200, total revenue falls which means that D is elastic | 1 mark  1 mark  1 mark  1 mark  1-2 marks |
| d. Income elasticity measures the responsiveness of demand to a change in income  Income elasticity of demand for smartphones would be **positive**.  An increase in consumer income is likely to lead to an increase in demand for smartphones because they are a normal (or superior) good. | 1 mark  1 mark  1 mark |

**Question 27 (12 marks)**

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| a. Define each term:  consumer surplus is the difference between the maximum price a consumer is willing to pay & the actual price they do pay  producer surplus is the difference between the minimum price a producer is willing to receive & the actual price they do receive | 1 mark  1 mark |
| b. Correctly labelled diagram showing Q < Qe & decrease in total surplus – DWL (see diagram below)  Explanation stating that when Q < Qe, there is a decrease in both consumer & producer surplus. | 1-2 marks  1 mark |
| c. i. Draw a new Supply curve shifting to the right – it shifts down vertically by $10,000  New equilibrium price = $62.500  New equilibrium quantity = 45,000  ii. Cost of subsidy = $10,000 x 45,000 = $450 million | 1 mark  1 mark  1 mark  1 mark |
| d. The subsidy will increase consumer surplus – consumers buy a greater quantity at a lower price  The subsidy will increase producer surplus – producers sell a greater quantity at a higher price ($62,500 + $10,000 sub)  The subsidy will actually **decrease** market efficiency because the cost of the subsidy is greater than the combined increase in CS & PS. | 1 mark  1 mark  1 mark |

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**SECTION 3 (40 marks) – Answer TWO questions**

**Question 28** **(20 marks)**

*The price of lamb in Australia has skyrocketed amid ongoing drought conditions as well as strong export sales to Asia.*

a. Use a demand/supply model to explain why lamb prices have increased. Use your model to determine whether the quantity produced will increase or decrease.   (10 marks)

b. i. Explain whether the demand for lamb would be price elastic or price inelastic – use a model to illustrate the difference and refer to the factors affecting price elasticity of demand. (5 marks)

ii. Explain whether the supply of lamb would be price elastic or price inelastic – use a model to illustrate the difference and refer to the factors affecting price elasticity of supply. (5 marks)

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| a. Draw a D/S model showing initial equilibrium price & qty  1. Draw a decrease in supply – caused by the drought. Explain that this change will increase equil price and decrease equil qty  2. Draw an increase in demand – caused by increased sales to Asia. Explain that this change will increase equil price and increase equil. Qty  3. Explain that it is not possible to predict what will happen to the equilibrium qty – it could fall, rise or stay the same depending on the size of the shifts | 1-4 marks  1-4 marks  1-2 marks |
| b. Demand for lamb – use a diagram to illustrate the difference between elastic & inelastic demand  Is demand (lamb) elastic or inelastic? Could argue either way, depending on reasons  e.g. inelastic – necessary (essential food product); for some consumers not a large part of the weekly budget; lamb viewed as different to other meats  e.g. elastic – close substitutes such as beef, chicken, consumers can switch to cheaper alternatives; for many consumers not a necessity; many consumers now purchase less meat so more elastic  Supply of lamb – use a diagram to illustrate the difference between elastic & inelastic supply  Supply (lamb) would be inelastic – it is seasonal & takes time to bring to the market, it cannot be manufactured in a few days; it is a perishable product | 1-2 marks  1-3 marks  OR  1-3 marks  1-2 marks  1-3 marks |

**Question 29** **(20 marks)**

(a) The government wants to help poorer consumers by introducing a price ceiling on essential food items. Use a demand/supply model to analyse and explain the effects of the price ceiling on both equity and market efficiency. (12 marks)

(b) Explain why a government would prefer to tax a good with relatively inelastic demand rather than elastic demand. Use a model to support your answer. (8 marks)

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| a. Meaning of price ceiling – a maximum price set below the equilibrium price. It causes qty demanded to increase & qty supplied to decrease, resulting in a shortage.  Correctly labelled diagram of a price ceiling  Effects on equity – the price ceiling will reduce the price of essential food items which will improve equity, however, there is now a shortage and some consumers may get less food which has a negative effect on equity  Effects on market efficiency – the price ceiling reduces market efficiency because it causes a deadweight loss (DWL) – a decrease in total surplus. | 1-4 marks  1-2 marks  1-3 marks  1-3 marks |
| b. Need to explain TWO reasons:  Taxing a good with inelastic demand will raise more tax revenue than taxing a good with elastic demand – this is because qty demanded will not fall by much after the tax is applied  Taxing a good with inelastic demand results in a smaller deadweight loss (DWL) compared with taxing a good with elastic demand – this is because qty will not fall by much  Correctly labelled diagram (see below) showing tax applied with inelastic demand – showing tax, change in qty, tax revenue & small DWL. | 1-2 marks  1-2 marks  1-4 marks |

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**Question 30** **(20 marks)**

(a) By using examples, explain the differences between a negative externality and a positive externality. (6 marks)

(b) Choose either a negative or a positive externality and demonstrate using a demand/supply model, how the externality affects market efficiency. (6 marks)

(c) What are public goods and common resources? Provide an example of each and explain why they cause markets to fail. (8 marks)

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| a. Negative externality: when the act of consuming or producing a good creates an external cost on other people, e.g. a factory that pollutes the atmosphere may adversely affect people’s health – social costs > private costs  Positive externality: when the act of consuming or producing a good creates an external benefit on other people, e.g. a property with a beautiful garden provides benefits to neighbours – social benefits > private benefits | 1-3 marks  1-3 marks |
| b. Diagram showing either a negative or a positive externality – perhaps 4 marks for correctly labelled diagram & 2 marks for some explanation  Negative externality – show the social supply curve above the private supply curve, label the external cost, show the equilibrium qty above the efficient qty, label the DWL. (see fig 5.3 P&K)  Positive externality – show the social demand curve above the private demand curve, label the external benefit, show the equilibrium qty below the efficient qty, label the DWL. (see fig 5.4 P&K) | 1-6 marks  OR  1-6 marks |
| C. Public goods are goods that are nonrival & nonexcludable – this means that they can be collectively consumed & non-payers cannot be excluded  Common resources are goods that are rival & nonexcludable – this means that consumption by one affects the consumption of others & non-payers cannot be excluded  An example of a public good is national defence; national park; free to air TV  Public goods suffer from market failure because they tend to be undersupplied due to ‘free riders’  An example of a common resource is fish in the ocean; wildlife e.g. tigers, elephants, whales; congested highways  Common resources suffer from market failure because they are overexploited or depleted due to the tragedy of the commons | 1-2 marks  1-2 marks  1 mark  1 mark  1 mark  1 mark |