**ECONOMICS Unit 1 Examination Semester 1 2018**

**Marking Guide**

**Section 1 (24 marks)**

1 D

2 C

3 C

4 D

5 D

6 B

7 C

8 A

9 B

10 B

11 C

12 C

13 A

14 C

15 C

16 A

17 B

18 D

19 C

20 B

21 B

22 A

23 D

24 B

**Section 2 (36 marks)**

**Question 25 (12 marks)**

|  |  |
| --- | --- |
| 1. Define Demand  * The quantity of a good or service that consumers are willing and able to buy at particular price and at a particular time. | 1 mark |
| 1. Construct a demand curve (D1) and supply curve (S1) based on the demand and supply schedule for bananas. | 1 mark |
| 1. price fell below the market equilibrium to $2.00 per kilogram, explain the impact this would have on the market.  * If the price was set at $2.00, a shortage will develop * Demand will expand to 3000kg and supply would contract 1000kg giving a 2000kg shortfall * The shortage would only be temporary. The market will eventually return to the equilibrium price of $6 and equilibrium quantity of 2000 kg | 2 marks  1 x shortage  1 x referring to graph -Must reference figures for full marks |
| 1. Calculate the price elasticity of supply for bananas if the price increased from $8.00 per kg to $10.00 per kilogram. Explain your answer.   Es = % change in Qs  % change in price  Or  Es =  Qs X P  Qs  P    = 500 x 8 = 0.8  2500 2   * The price elasticity of supply for bananas is inelastic. This means that as price changes, farmers are unable to alter supply quickly due to the long term nature of the production of bananas. Farmers cannot easily take advantage of price rises | 2 marks  1 mark  1 mark |
| 1. Calculate the cross elasticity of demand if the price of bananas increases from $8.00 per kg to $10.00 per kg and results in the demand for oranges increasing from 3000 kg to 4000 kg. Explain your answer.   Eab = % change in Qa  % change in Pb  Or  Eab =  Qa X Pb  Qa  Pb    1000 X 8 = 1.33  3000 2   * The cross elasticity of demand is positive indicating that the goods are substitutes. A rise in the price of one will cause an increase in demand of the other. The fact the answer is positive and elastic suggests they are strong substitutes. | 2 marks  1 mark  1 mark |
| 1. Complete the demand and supply schedule by adding 500kg to the original quantity demanded at each price level in column D2. Plot this new demand curve onto the graph indicating the new market equilibrium. | 1 mark  ½ mark  Completing table  ½ correct demand curve |
| 1. Discuss two (2) possible reasons for this increase in demand from D1 to D2.   Any 2 valid points   * **Advertising campaign** encouraging the consumption in bananas * **Special health benefits** found from recent research e.g. live 10 years longer if you eat banana’s * **Rise in the price of a substitute** like oranges may increase the demand for banana’s * Fruit can be expensive, as **incomes** rise, people can afford to buy more | 2 marks  ½ mark for reason / ½ mark for explanation |

**Question 26 (12 marks)**

|  |  |
| --- | --- |
| 1. Explain the difference between a price floor and a price ceiling.  * A price floor is a legislated minimum price set above the equilibrium price. Its purpose is to raise the income of producers. E.g. Farmers * A price ceiling is a legislated maximum price set below the equilibrium. Its purpose is to lower prices for consumers e.g. rental market NYC. | 2 marks  1 mark  1 mark |
| 1. Explain the effect of a price floor on the dairy market and use a diagram to show what happens to the quantity supplied and quantity demanded       A  P1  B  D  P2  E  C   * The price floor results in a surplus because the quantity sellers are willing to sell exceeds the quantity buyers will purchase. Qty demanded contracts q1 to q2 and Qty supplied increases from q1 to q3 | 3 marks  2 marks  Diagram  1 mark |
| 1. Who will benefit from the price floor and who will lose? Explain how the price floor will affect market efficiency referring to the changes to consumer and producer surplus  * Price floors help low income producers (justified grounds of equity). Producers of milk will benefit because their revenue will increase (p1xq2) – Demand (milk) is price inelastic. Producer surplus will increase (from C to C,B). * Consumers of milk will lose since they are forced to pay more (P1) –   consumer surplus will decrease (ABD to A). That is they will pay more (P1 and receive less q1)   * Price floor results in a decrease in total surplus and creates a DWL (DE) – inefficient market as failed to produce the optimal quantity. Resources are being misallocated   Must refer to diagram for full marks | 5 marks  1-2 marks  1-2 marks  1 mark |
| 1. At the price of $2 per litre of milk, 1 million litres of milk are sold and total revenue for producers is $2,000,000. When a price floor is introduced, the new quantity demanded is 970,000 litres and total revenue is $2,134,000. What is the price floor for a litre of milk? Is milk elastic or inelastic?  * $2,134,000 / 970,000 = $2.20 * Inelastic | 2 marks  1 mark  1 mark |

**Question 27 (12 marks)**

|  |  |
| --- | --- |
| 1. Define externalities.  * Externalities occur when third parties are affected by other peoples’ economic decisions. They can be positive or negative and a result of over or under production and consumption. | 1 mark |
| 1. What are the negative external effects of a high level of economic growth in China?  * Results in pollution from dependence on coal for electricity production - air pollution, visual, waste, cars – co2 * “Toxic Growth’ – health problems such as lung disease * Congestion from economic activity - 5 million cars on the road in Beijing. * Environmental damage to rivers, resource depletion * Impacts on some sections of the economy – tourism * Impact on rural communities/way of life/traditions | 2 marks  1 x 2 |
| 1. With the aid of a diagram, explain the implications for Chinese car manufactures, consumers and the government of including negative externalities into the cost of production through the use of pollution taxes.     F  DC  E  C  B  A    **Car manufacturers**   * Car manufacturers will have to pay a tax equal to the external cost (P1Po). The tax increases the car manufacturers private costs, which shifts the private supply (Sp) curve to the left to social supply curve (Ss). (reduces output). The tax increases the price of the good from Pe to Po and output decreases from Qe to Qo. Tax provide firms with incentives to reduce their pollution. Producer surplus decreases from (DEF top F)   **Consumers**   * Consumers pay a higher price. Price increases from pe to po and quantity demanded falls from Qe to Qo. Consumer surplus decreases from ABC to A.   **Government**   * Gain revenue (p1-Po x Qo). Tax is equal to PoP. This is a gain to society as it can be reallocated into society as infrastructure spending or welfare   Full marks – must consider relative elasticity e.g. cars inelastic, most of the burden of the tax will fall on the consumers. | 6 marks  2 marks  2 marks  1 mark  1 mark |
| 1. The government in Beijing says it wants to get control of pollution. Besides production taxes, what other solutions would help to minimize the externalities caused by pollution   **Any 3 valid points**   * Education * Alternative energy sources – wind solar * Research and development in more efficient coal generated electricity production * Bans/fines/regulation of polluting industries * Cars – limits on use, car-pooling, car exclusion areas in the city, toll booths * Public transport, infrastructure, rail systems | 3 marks  1 x 3 |

**Section 3 (40 marks)**

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

1. What are the characteristics of a market economy? (6 marks)
2. What is meant by the term equilibrium? (4 marks)
3. Use demand and supply analysis to explain the concept of a market shortage. How does the price mechanism correct a shortage in the market? (10 marks)

|  |  |
| --- | --- |
| * **Private property** Labour resources, natural resources, capital resources (e.g., equipment and buildings), and the goods and services produced in the economy are largely owned by private individuals and private institutions rather than by government. * **Freedom of enterprise and choice** Private entrepreneurs are free to obtain and organize resources in the production of goods and services and to sell them in markets of their choices. Consumers are at liberty to buy that collection of goods and services that best satisfies their economic wants. Workers are free to seek any jobs for which they are qualified. * **Self-interest**   The "Invisible Hand" that is the driving force in a market economy is each individual promoting his or her self-interest. Consumers aim to get the greatest satisfaction from their budgets; entrepreneurs try to achieve the highest profits for their firms; workers want the highest possible wages and salaries; and owners of property resources attempt to get the highest possible prices from the rent and sale of their resources. * **Competition** Economic rivalry means that buyers and sellers are free to enter or leave any market and that there are buyers and sellers acting independently in the marketplace. It is competition, not government regulation, that diffuses economic power and limits the potential abuse of that power by one economic unit against another as each attempts to further its own self-interest. * **System of market and prices**  Markets are the basic coordinating mechanisms in our type of economy, not central planning by government. A market brings buyers and sellers of a particular good or service into contact with one another. The preferences of sellers and buyers are registered on the supply and demand sides of various markets, and the outcome of these choices is a system of product and resource prices. These prices are guideposts on which participants in markets make and revise their free choices in furthering their self-interests. * **Limited government**  A competitive market economy promotes the efficient use of its resources. As a self-regulating and self-adjusting economy, no significant economic role for government is necessary. However, a number of limitations and undesirable outcomes associated with the market system result in an active, but limited economic role for government. | 6 marks  1 mark  1 mark  1 mark  1 mark  1 mark  1 mark |
| * The **equilibrium price** and **equilibrium quantity** are set at the point where demand equals supply      * **Equilibrium Price (PE)**   The price that balances quantity supplied and quantity demanded   * **Equilibrium Quantity (QE)**   The quantity supplied and quantity demanded at the equilibrium price   * **Markets ‘tend towards equilibrium’** if left to run smoothly, the market price (the current price of the good or service) will move to the place where demand equals supply, and will rest there, ceteris paribus. This effect is known as **‘market clearing’** * **Market clearing:** A market clears when supply and demand are equal, leaving no shortage or surplus * **Total surplus is maximized**   (C)     * A shortage occurs in the market when there is excess demand over supply * If the price is set below equilibrium price, at $1.25 per cup of hot chocolate, the quantity of the good demanded (10 cups) exceeds the quantity supplied (4 cups) * This happens because the price of the product is below the market equilibrium price. Creates a DWL. * Consumers that demand hot chocolate are unable to buy all they want at the going price * A shortage is only a temporary situation and the market will self- correct. Price Mechanism or invisible hand. * With too many buyers chasing too few goods, sellers respond to the shortage by raising their prices without losing sales (supply expands) * The higher price will contract demand as some consumers are priced out of the market * Eventually the market will return to equilibrium.   Must refer to diagram for full marks | 4 marks  1 mark  diagram  1-3 marks  2 marks  1 mark  Reference to diagram  1-7 marks explanation |

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

1. Explain the difference between a competitive and non-competitive market. (4 marks)
2. Explain the role of the Australian Competition and Consumer Commission (ACCC) in promoting competition in the economy. (6 marks)
3. With the aid of examples, describe solutions available to governments to correct different types of market failure. (10 marks)

|  |  |
| --- | --- |
| A competitive market   * A large number of buyers and sellers * Firms are price takers * Very similar products * Easy entry into the market   A non-competitive market   * A small number of firms * Product differentiation * Firms are price setters * Difficult to enter the market | 4 marks  1 x 2  1 x 2 |
| * The ACCC (The Australian Competition and Consumer Commission) is an independent Commonwealth Statutory authority whose role is to enforce the competition and Consumer Act 2010, promoting competition for the benefit for all Australians * The ACCC aims to protect, strengthen and supplement the way competition works in Australian markets and industries to improve the efficiency of the economy and improve the welfare of Australians * The ACCC seek to ensure that consumers benefit from increased competition in the form of lower prices and a better service * The ACCC prohibit anti-competitive behaviour   Anticompetitive practices refer to a wide range of business practices in which a firm or group of firms may engage in order to restrict inter-firm competition to maintain or increase their relative market position and profits without necessarily providing goods and services at a lower cost or of higher quality.  Four key goals of ACCC   * Maintain and promote competition and remedy market failure * Protect the interests and safety of consumers and support fair trading in markets * Promote the economically efficient operation of, use of and investment in monopoly infrastructure * Increase our engagement with the broad range of groups affected by what we do.   Or   * Discuss the ACCC – what they do, relate to Competition & Consumer Act.      * Aim is to increase competition in markets in order to reduce prices, increase output & increase total surplus. * Discuss three different types of anti-competitive business practices that reduce competition * e.g. price fixing; collusion; market sharing, mergers/takeovers, exclusive dealing, predatory pricing. | 6 marks  1 x 4 explanation  1 x 2  Goals of ACCC  1 x 3 role  1 x 3 examples |
| (c)   * Tax’s – negative externalities e.g. pollution * Subsidies – positive externalities (immunisation, solar panels * Legislation (laws) – Restrictive trade practices (collusion), environmental (water restrictions, littering) consumer protection * Bans – fires in summer, * Sale of property rights avoid tragedy of the commons – e.g. Game reserves * Education campaigns - * Production seasons (abalone), zones (commercial fishing) | 10 marks  4 x 2 solutions  MUST PEE  1 x 2  Diagram on subsidy or tax |

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

1. Explain the meaning of price elasticity of supply and, using a diagram(s), distinguish between price elastic and price inelastic supply. (6 marks)
2. Discuss three factors that would cause the demand for a good to be relatively price elastic.

(6 marks)

1. Explain how economists use the concept of elasticity to distinguish between normal and inferior goods and between substitutes and complements. (8 marks)

|  |  |
| --- | --- |
| (a)   * **Price elasticity of supply** is a measure of the responsiveness of quantity supplied to a change in price. * The main influence on price elasticity of supply is the extent to which resources (e.g. Land, Labour, Capital) are flexible and mobile*.* * PES = % change in quantity **supplied**   % change in price   * If it is possible to adjust the production of a product quickly and easily, and/or products can be moved in and out of storage easily, supply will be **elastic**. (**greater than 1)** e.g. ipads   Elastic supply    Inelastic supply   * If it is not possible to alter production and adjust stocks quickly and easily when price alters, supply will be **inelastic**. **(less than 1)** e.g. wheat | 6 marks  1 x 2 diagrams  1-4 marks  explanation |
| (b)   * The number of close substitutes available - the more close substitutes there are in the market, the more elastic is demand because consumers find it easy to switch. E.g. apples and oranges * Necessity v luxury - necessities tend to have an inelastic demand e.g. bread, milk and petrol. Luxuries tend to have a more elastic demand, as they are not essential e.g. designer clothes, holidays etc. * Proportion of income spent - products that take up a high % of income will have a more elastic demand e.g. purchase of a new car, than those that take up a small % of income e.g. baked beans. * Time – over time demand becomes more elastic. E.g. if consumers have time to respond to a price change then demand will be more elastic as they can delay the purchase or switch to alternatives. However, if a price changes suddenly, consumers will purchase regardless as a they don’t have alternate choices. Therefore demand will be inelastic. E.g. petrol price rises | 6 marks  3 x 2  Must PEE |
| (c)   * Income elasticity of demand measures the sensitivity (responsiveness) of demand to changes in the income of those who buy the product * **Income elasticity of demand = % change in quantity demanded**   **% change in income**   * **Income elastic** products are those where **demand is very responsive** to changes in income; they are called **luxury**. A rise in income leads to a **proportionately higher** rise in quantity demanded.   Coefficient > 1   * **Income inelastic** products are those where **demand is relatively unresponsive** to changes in income. We might buy slightly more of the product when incomes increase, but the **percentage rise in demand is not as great as the percentage rise in income**. These are called **normal goods.**   Coefficient 0-1   * **Inferior goods** are goods that we actually **buy less of as our incomes increase**, because they are seen as being somewhat of a poor alternative and once incomes increase we can ‘trade-up’. Vice versa - demand for inferior goods increases when incomes fall. There is a negative relationship between income and demand – as one rises, the other falls. * Coefficient < 0 * Income elasticity allows us to **forecast the effects of income changes on the demand for specific products.** * Cross Elasticity of demand   Eab = % change in Qa  % change in Pb   * Cross elasticity measures the sensitivity/responsiveness of demand for one good (a) to a change in the price of another good (b) (either a substitute or complement)   Substitute goods are two alternative goods that could be used for the same purpose. E.g. McDonalds and KFC, Gatorade and powerade   * Substitute goods have a positive cross elasticity e.g. if the price of butter rises then the demand for margarine will increase ( move in same direction)   Complementary goods are products which are used together. E.g petrol and cars, tennis balls and racquets  Complemenary goods have a negative cross price elasticity of demand. A rise in the printers will cause the demand for ink to fall. | 8 marks  1 x 4  1 x 4 |

**Question 31** **(20 marks)**

1. What is meant by market concentration? Explain, with the aid of a diagram and examples, the impact of companies having too much market power? (10 marks)

1. The Australian Government plans to introduce a tariff on steel. With the aid of a demand and supply diagram explain the likely impact that a tariff on steel will have on consumers, producers and the government. (10 marks)

|  |  |
| --- | --- |
| * Concentration is defined by the four largest firms controlling one-third or more of the market, over half the industries in the Australian marketplace are concentrated. * Examples: discussion on the lack of competition in the banking or supermarket industry (oligopolies) * Over 80% of the market is controlled by the biggest four firms in each these industries. * Use D/S model to show how a firm with market power (e.g. monopoly) raises prices by reducing output.      * Market power – ability to influence price by varying output. * A monopoly for example, can increase price in a market by restricting output. * Consumer surplus decreases * Producer surplus increases * net decrease in total surplus – a DWL. | 1 mark  2 marks  3 marks  1 – 4 marks |
| **Tariffs –** a tax on imports designed to give domestic producers a competitive advantage    Sd - Domestic Supply  Dd - Domestic Demand  W – World price  T - Tariff imposed   |  |  |  | | --- | --- | --- | |  | Before Tariff | After Tariff | | Domestic production | OQ1 | OQ3 | | Domestic Demand | OQ2 | OQ4 | | Imports | Q1Q2 | Q3Q4 |   Consumer and producer surplus analysis   |  |  |  | | --- | --- | --- | |  | Before Tariff | After Tariff | | Consumer surplus | a+b+c+d+e+f | a+b | | Producer surplus | g | g+c | | Government gain |  | e | | Dead weight loss (loss of total welfare to society |  | d+f |  * The tariff harms Australian consumers of steel products by increasing prices/inflationary and reducing the quantity of imports – consumer surplus decreases– refer to diagram. * The tariff harms other Australian industries that use steel as inputs in production – their costs increase (inflationary), reducing employment, output & competitiveness. * Government gain revenue from tax – refer to diagram * Creates a DWL – resources allocated to inefficient industries | 1 mark  2 marks diagram  1 x mark  Tables  1x2 marks  1 x 2 mark  1 mark  1 mark |