



## 2018 Full Paper Solutions

### Section A

Q1.

- **Price Taker**
- The firm has no option but to sell its output at the current market price
- Each firm supplies such a tiny fraction of the market that it cannot influence market price
- **Goods are homogenous**
- The goods supplied by suppliers are all exactly the same, no brands exist. Therefore, pointless to advertise.
- **Freedom of entry to and exit from industry**
- Firms already in the industry cannot prevent new firms from joining the industry.
- No barriers to entry exist e.g. no patents

Q2.

- **Increased level of Savings**
- As interest levels rise the return on savings rise.
- People will therefore hold more money on deposit.
- **Decreased level of Investing**
- As interest rates rise, the cost of capital also rises.
- It may become too expensive for companies to invest in new projects
- Housing crisis could worsen as a result.

Q3.

- **Customs Union**
- A customs union exists where the member countries agree to remove all trade barriers between them and impose a common tariff on imports outside the union.

Q4.

- **Law of Diminishing Marginal Returns**
- As additional units of a variable factor of production are added to a fixed factor of production, a point is reached where the returns to the variable factor of production employed begins to decline. E.g. too many chefs in the kitchen
- This law applies only in the short run because in the short run at least one input is fixed. In the long run all factors of production are variable.

Q5.

- False-True-False-False

Q6.



- **Equity**
  - The systems of taxation should take a higher proportion of income in tax as income rises. This means the ability of each person to pay is considered
- **Economy**
  - The costs of collection should be small relative to the amount of revenue being collected. E.g. Under -returners for VAT can lead to costly court cases for Revenue. High penalties are designed to avoid.
- **Certainty**
  - The amount paid should be certain and clear
  - This allows the state to plan effectively.
  - The VAT collected by revenue is determined by the demand for goods and services, making this an uncertain amount.
- **Convenience**
  - It should be convenient for taxpayers to pay tax.
  - E.g. Income tax, PRSI and USC are taken straight from the payslip.

Q7.

- **Target Universal Benefits**
  - Benefits such as Child Benefit should be means tested.
  - There are parents who struggle greatly to raise their kids while others do not need Child Benefit to raise their children.
- **Wealth Taxes**
  - Just like in France, a tax could be imposed on the super wealthy,
  - All income over 1 million euro is taxed at 75%
  - The revenue earned from this could be shared among the poor.
- **Decrease in Investment**
  - If the government decide to tax the super-rich, they may slow their investments in the economy in order to not break into the higher tax bracket.
  - Less investment could see a fall in demand for goods and services, leading to unemployment.

Q8.

- **Increase in Government Revenue**
  - As people work longer, they will contribute to PAYE, PRSI and USC for longer
  - This increases government revenue and allows the government to invest in projects to satisfy the greying population
  - E.g. More investing in Health Services
- **Increased Demand for Goods and Services.**



- People will earn more in their late 60's as salaries are higher than pension payments.
- Their extra income will result in higher demand for goods and services.
- Increased demand could lower unemployment.
- **Increased youth unemployment**
- If the retirement age is increased, people will hold onto their positions for longer.
- This could reduce the number of vacant positions to be filled at companies
- College graduates and School leavers would be worst affected.

Q9.

- **Price Discrimination**
- Selling the same product at different prices to different consumers at varying ratios of marginal cost to price. The change in price does not reflect a change in the cost of production. E.g. Student cinema tickets.
- **Separation of markets**
- There must be a way to ensure that the low-priced tickets are not resold to the higher priced market.
- Otherwise the buying and reselling would continue until everyone was on the lower price.
- E.g. id required for student tickets
- **Different Consumer P.E.D**
- Different consumers have different price elasticities of demand. The price discriminator charges higher prices to consumers with inelastic demand and the lower prices to consumers with elastic demand.
- **Monopoly Power**
- Firms must have some ability to alter the market price.
- Otherwise firms would enter the market and charge a lower price where the supplier was earning SNP.
- E.g. in most cases Ticketmaster are the only suppliers of tickets for concerts and can therefore charge extra for V.I.P tickets.



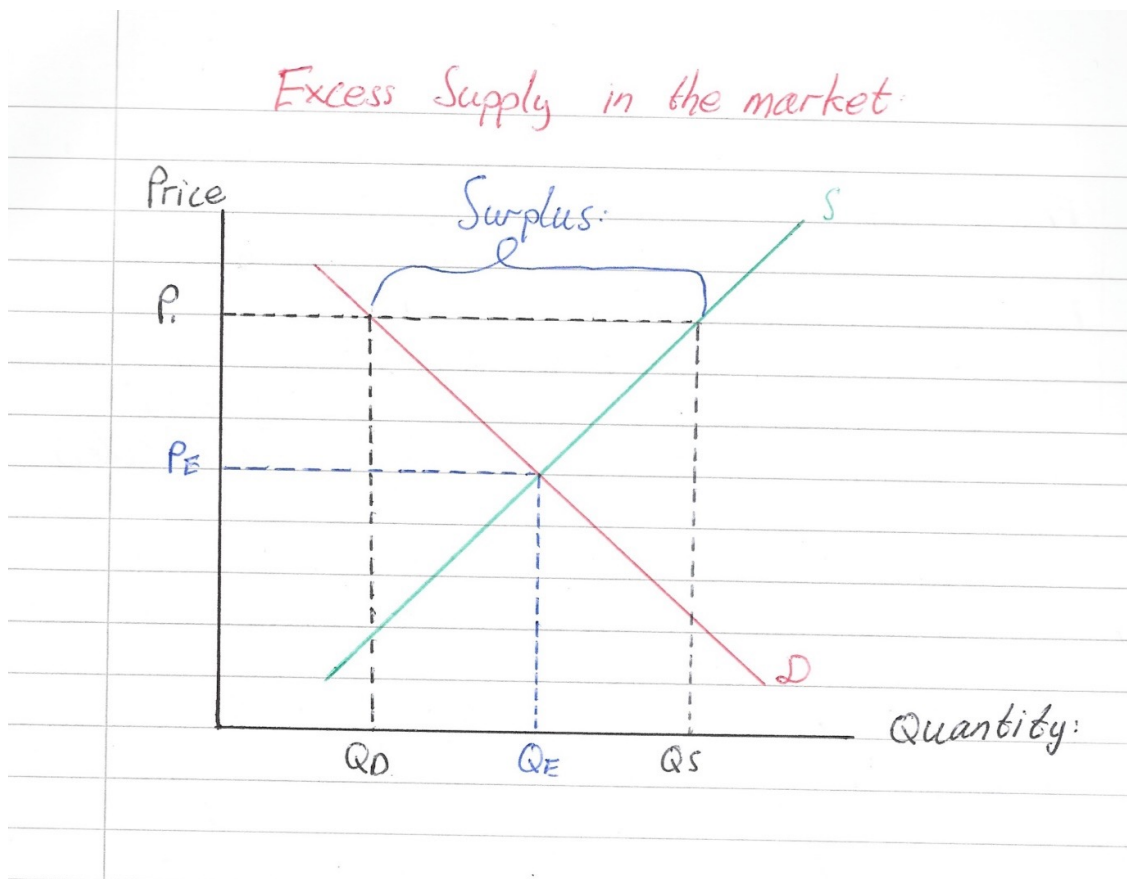
## Section B Question 1

(a)

- **Movement along a demand curve**
  - This is where the quantity demanded has changed due to a change in price
  - All other factors remain unchanged
  - Diagram showing movement along demand curve
  - As price falls quantity demanded rises for normal goods
- **Shift in the demand curve**
  - A shift in the demand curve means that the quantity demanded at each price has changed due to a factor other than the change in prices

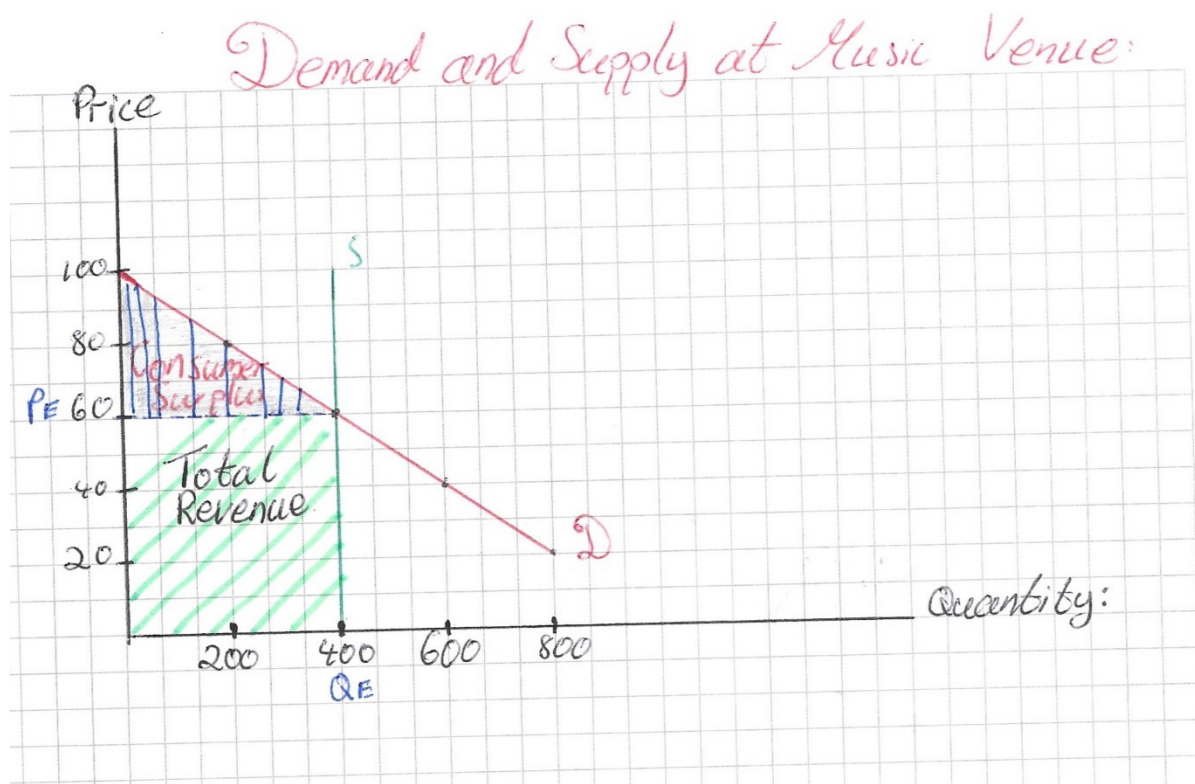


- (ii)





- Excess supply in the market indicates that sellers are unable to sell all their goods
- In order to clear their goods, sellers lower their prices.
- A movement along the supply curve occurs
- As prices lower, consumers are enticed to buy more of the good, in according with the law of demand.
- A movement along the demand curve occurs
- Prices will continue to fall, and demand will continue to rise until the market reaches equilibrium
- Sellers sell all the goods they want, and consumers buy all the goods they demand.
- (b)



- The shape of this supply curve is an example of a fixed supply curve.
- Regardless of the demand for tickets, the venue is restricted by its 400 capacity.
- Its supply is perfectly inelastic
- **Consumer Surplus**
- Consumer surplus is the difference between what the consumer paid for the product and the maximum price s/he was willing to pay for it rather than go without the product.
- **Total Revenue**
- Total revenue is all the money made from sales i.e. Price x Quantity
- The consumer surplus region is the region on the graph between equilibrium price and the demand curve.



- The Total revenue section is the square created by the equilibrium price and the equilibrium quantity.

(C)

- The venue owners know that there are consumers who are willing to pay more than the standard ticket rate to see their favourite band.
- The owners can extract this consumer surplus by offering something extra to these dedicated consumers.
- E.g. meet and greet the band, seats closer to the stage etc.
- By extracting consumer surplus, the venue owners are also maximising their profits.

## Question 2

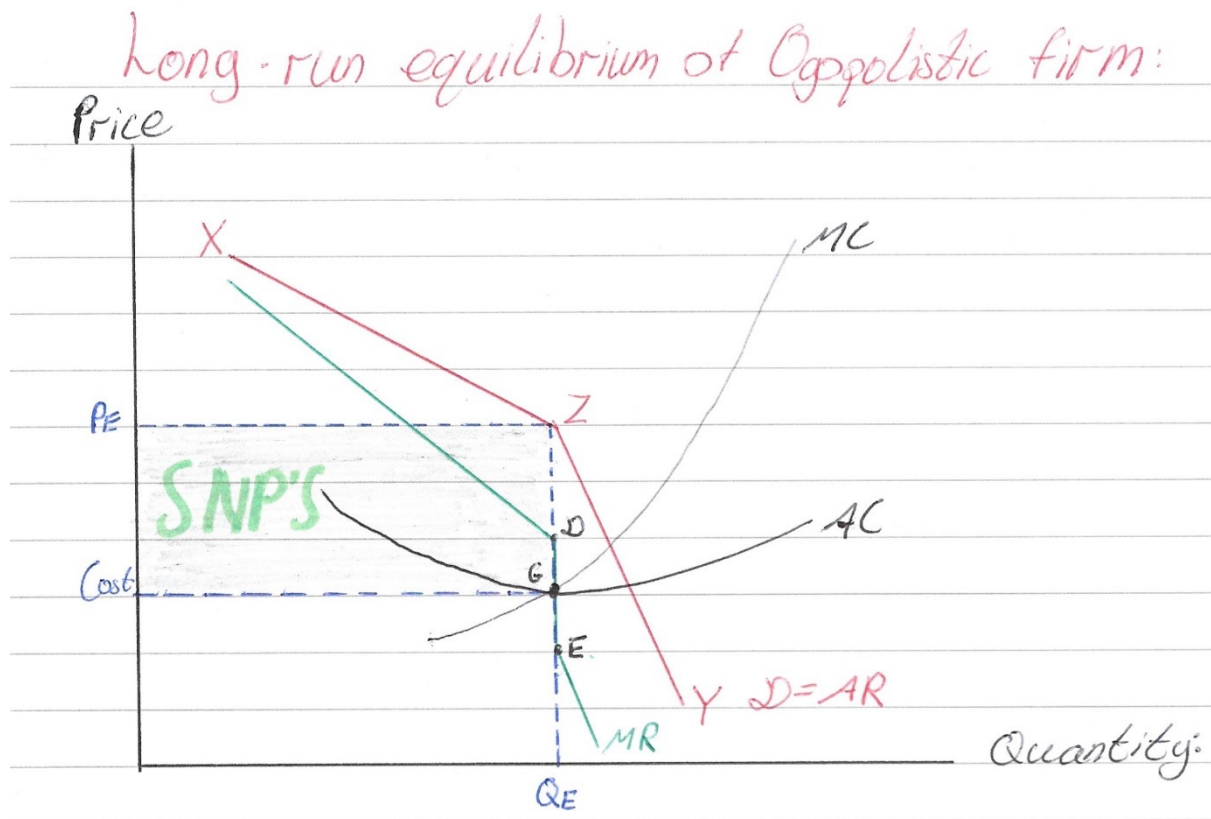
(a)

- Due to the fear of how competitors will react will react phone 10 not engaging price competition but rather engaged in non price competition to gain consumers .
- They want to avoid a price war so instead they concentrate on product differentiation.
- firms may compete on after-sales service e.g Kia 7 year warranty
- And there is a focus on loyalty e.g Tesco Clubcard
- Advantages
- Stability in prices
- Since firms tend to focus on non-price competition, prices rarely change.
- This allows consumers to budget accurately.
- Comparing prices across the industry is also easier.
- Quality of products
- The goods sold in the oligopolist market are very close substitutes.
- Therefore, firms may improve the quality of their products to retain their customer base.
- E.g. Free software updates on phones.
- Disadvantages
- Supernormal profits
- In the long run, oligopolistic firms earn SNP where  $AR > AC$ .
- As a result, consumers are exploited by these higher prices.
- The consumers get less value for money.
- Collusion
- Firms within the industry may meet to restrict the supply of a certain good.
- If the good faces an inelastic demand curve, prices will rise.



- OPEC is an example of a cartel which has a major influence on international oil prices.

(b)



- **Equilibrium**
  - Occurs at point 'G' on the diagram
  - Where  $MC=MR$
  - And MC cuts MR from below
- **Price and Output**
  - The firm sells its output at  $P_1$  and produces quantity  $Q_1$
- **Cost of Production**
  - The cost per unit of quantity is shown at point C1 on the diagram.
  - Should costs rise between point D and E then market price will not change.
  - This is known as price rigidity.
- **Supernormal profits.**
  - SNPs are earned as  $AR > AC$ .
  - SNPs are earned in the long run as there are barriers in place to prevent other firms entering the industry.
- **Price rigidity**
  - The firm faces an elastic demand curve XZ.



- If a firm increases its prices other firms will leave their prices unchanged.
- The firm will lose many customers.
- The firm faces an inelastic demand curve ZY.
- If a firm lowers its price other firms will match the price decrease.
- The firm will gain a few extra customers, no additional revenue will be earned.
- A price leader sets the price at point Z.
- Fearful of a price war, all other firms will not deviate from this price, even when costs change.
- Hence prices remain rigid.

(c)

- **Higher prices**
- Firms will collude to have premiums at an inflated rate
- Ultimately consumers will have to pay the higher premiums, and this reduces their disposable income.
- And since all firms are colluding there will be nowhere to go for a more competitive price.
- **Restricted choice**
- Because of the agreement of firms not to compete, consumers may have less choice on the types of insurance available
- The quality of insurance given may also suffer
- E.G. customer service, the benefits possible under policies etc.

(ii)

- **Deregulation of the industry.**
- The government could attempt to deregulate the industry by lowering the barriers to entry.
- Grants could encourage the growth of small firms so as to eliminate inefficiency and to encourage better resource allocation.
- Small firms will erode the SNPs earned by the industry and make the market more competitive.
- E.g. When the taxi service was deregulated the market became more effective and more competitive.
- **Improve Consumer Awareness**
- The government through strong advertising could encourage consumers to shop around and to look at their options.
- It is known that switching insurance providers can lead to cheaper premiums, yet the majority of Irish consumers don't.
- E.g. 'Chill insurance' provides insurance quotes from up to 14 insurance providers.

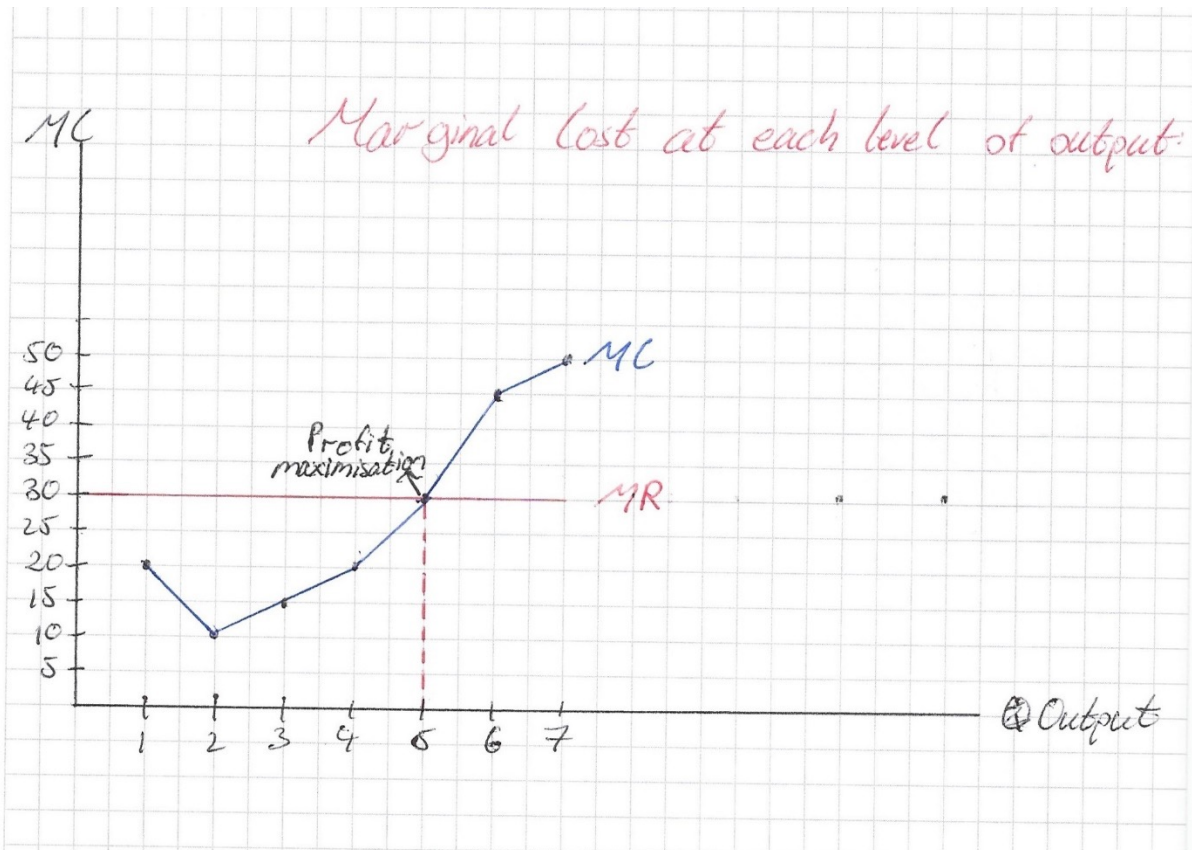
### Question 3





(a)

- **Marginal cost**
- Marginal cost is the addition to total cost as a result of producing one extra unit of output.
- Fill in table Mc is (Tc after)-(Tc Before).



- Profit maximisation occurs where  $MC=MR$
- Profit=Total Revenue (Price x Quantity)-Total Costs.
- **Price Elasticity of Supply.**
- Price elasticity of supply measures the degree of responsiveness of quantity supplied to changes in price.

(ii)

- In the short run, the quantity supplied is not very responsive to the price.
- Firms may find it difficult to respond to a change in price by changing output.
- Firms cannot easily change the size of their factories in the short run.
- E.g. Even if the demand for iPhone was to double over night, Apple could not make the double the amount of iPhone overnight because they simply wouldn't have the labour or the factory capacity to do so.
- With more time to adjust, the supply response becomes larger. Over longer periods, firms have more time and can build new factories, hire new staff and invest in capital and equipment.



- E.g. While the iPhone factory may not be built overnight, it can be working at full capacity within a couple of months.
- Hence supply is usually more elastic in the long run.
- **Firms Capacity:**
- If the firm is operating with plenty of capacity, it should be able to increase production output more quickly.
- The firm is therefore more able to respond to price.
- Hence price supply will be elastic.
- If a firm is operating at full capacity it won't be able to react as fast and hence supply will be inelastic.
- **Products in joint supply.**
- When a firm is producing two products, the supply of either will be more elastic than if the firm was only producing one.
- If the price of one of the products rises, the factors of production can be switched quickly to produce more of the product which has risen in price.
- E.g. Samsung supply several different goods such as televisions, phones, fridges etc.
- A fall in the value of sterling means that Irish goods will be more expensive in UK markets.

(C)

- **UK consumers will have to pay more for Irish goods.**
- Some sellers in the UK may choose not to pass on the higher prices in order to keep market share.
- The current fall in the value of sterling is a result of Brexit.

(ii)

- If the product has an inelastic demand, then there is scope for the firm to increase price by a large amount.
- When demand for a product is inelastic an increase in price should increase total sales revenue
- If PED is inelastic in the UK market they may decide to increase price, and as a result maximise total revenue.
- If the demand for a product is elastic the firm will try to avoid price increases.
- An increase in the price of a good which faces an elastic demand curve will result in a percentage loss in quantity demanded that is greater than the percentage rise in price, resulting in lower total revenue.

#### Question 4

(a)

- **Labour Productivity**
- The output produced per worker per unit of time e.g. per hour



- **Training**

- Improving skill levels will allow workers to complete tasks more efficiently.
- Or training can provide employees with the skills to complete new tasks.
- E.g. Many firms fund master's programmes for their employees.
- **Improve work conditions.**
- The working environment must be suited to the employees and the work taking place.
- In recent times there has been a surge in 'Google-like' offices.
- E.g. Standing desks, meditation rooms etc.
- Optimal conditions improve morale and make the workplace a more productive place.

(b)

- **Economies of Scale.**

- Economies of scale arise when unit cost of production falls as firm expands its scale of operations.

- **Purchasing Economies**

- A company that buys in large quantities can get bigger discounts from its suppliers than companies with smaller orders.
- They can also negotiate better terms for credit purchasing due to the size.
- This is one of the many reasons that custom-ordered Rolls Royce are more expensive than mass produced Fords.

- **Development of Specialist Firms.**

- As a firm expands, it will attract specialist firms that will perform tasks that can be contracted-out.
- As these firms are specialist in particular tasks, they improve efficiency.
- E.g. Cleaners in an accountancy firm.

(iii)

- **Fall in staff morale**

- Due to increased specialisation and the repetitive nature of some tasks, workers may experience frustration and boredom.
- In large firms, employees may feel like they are just a number on a payroll spreadsheet and may seek a more meaningful employment opportunity.
- This can lead to high labour turnover and low labour productivity.

- **Increased bureaucracy**

- A bigger firm might lead to more complex and bureaucratic management systems.
- The chain of command between managers and employees can become very complex.



- This can lead to communication difficulties which may slow down decision making process within the firm, leading to higher costs and missed opportunities.
- Administration costs may increase disproportionately as output increases.

(c)

- **Occupational mobility of labour**
- The ease with which workers can move from one job to another.
- **Geographic mobility of labour**
- The ease with which workers can move from one area to another for work purposes.
- **Housing**
- The cost of housing in some areas acts as a deterrent to geographic mobility.
- The cost of housing is so high in Dublin that only highly paid workers could consider living in the city centre.
- The volatility of rent prices across the country means that people are reluctant to move.
- **Family and social ties.**
- Moving for a job can cause disruption to a family unit.
- Children may have to leave their current school where many of their friends are.
- Some family members may have strong loyalty to certain sports clubs and will not be willing to simply play for a new club.
- All these act as a deterrent to the geographic mobility of labour.
- **Increase the supply of housing.**
- The Government should resume their role as the primary provider of affordable social housing.
- An increase in the supply of housing should stop house prices rising as supply begins to meet demand.
- This should be concentrated in places where the Housing Crisis is being experienced the worst i.e. the cities.

### Question 5

(a)

- **Fiscal Policy**
- Any action taken by the government which influences the timing, magnitude and structure of government revenue and expenditure.
- E.g. An increase in Child Benefit.
- **Monetary Policy**
- Any action taken by the ECB which influences the money supply, interest rates and the availability of credit.
- **Monetary Policy**



- **E.U Monetary policy may not suit Ireland.**
- Ireland's economy represents a tiny proportion of all European Union economic activity.
- Therefore, Ireland's economic situation may not always be the E. U's primary concern.
- What may suit some E.U countries is unlikely to suit everyone else.
- E.g. If the Irish economy is booming the appropriate monetary policy is to increase interest rates to stop the economy from overheating, however the ECB cannot increase interest rates just to suit Ireland.
- **Strict E.U Rules.**
- The E.U has imposed strict regulations on mortgage availability in Ireland.
- Currently first-time buyers must have at least 10% of the value of the house saved to put down as a deposit.
- While this may save the country from a crisis similar to 2008, a little leniency wouldn't go a miss in the current housing crisis where saving for a deposit while paying rent is borderline impossible.

(b)

- **Indirect tax**
- An indirect tax is a tax on the consumption of goods and services.
- E.g. VAT
- **Sugar tax introduced in April 2018**
- This tax was introduced to have a positive effect on nutrition and was designed to encourage healthy eating and shift consumption towards a healthier diet.
- It is hoped that consumers would be more responsible and make healthier choices like to drink water instead of coke.
- It is hoped that a reduction in consumption would tackle obesity, diabetes etc.
- **Excise duty on tobacco products.**
- In Budget 2018, there was a 50c increase in the excise duty on a pack of 20 cigarettes.
- Excise duties on tobacco products are designed to discourage their consumption as there is a clear correlation between cancer and tobacco consumption.
- However, cigarettes are highly addictive so it can be difficult for consumers to quit their consumption but smoking in Ireland has been on the decline since 2004 where smoking in public houses was deemed illegal.
- **Environmental levy on plastic bags**
- In 2002 the Irish Government brought in an indirect tax on plastic bags in the hope of reducing their usage. The small levy of 30c per bag, introduced in 2002 aimed to discourage the purchase of plastic bags, ultimately reducing litter.
- This levy has converted most of the population to the use of re-usable bags, which can be found at the till of all major supermarkets.
- Hence this levy has had a positive impact on the environment.



- **Government Grants.**

- The government has made many grants available to consumers who are looking to renovate their homes.
- These grants are designed to make consumers consider environmentally sustainable options such as solar panels and better home insulation.
- The Home Renovation Incentive (HRI) scheme lets homeowners claim tax relief on repairs, renovations or improvement work that is carried out on their home. This effectively drops the VAT rate to zero.

(c)

- **Budget Deficit**

- A budget deficit arises when government current expenditure is greater than government current income.
- **Less government borrowing.**
- A smaller deficit means the government can borrow less in order to fund the expenditure planned in the budget.
- This reduces the interest payments the government will have to make to service the national debt.
- This also reduces the burden of the national debt placed on future generations.
- **Improved image of country abroad.**
- A reduced budget deficit shows that Ireland is in a better place financially than it was before.
- This could lead to an increase in the credit rating of Irish bonds.
- Moody's credit rating for Ireland was last set at A2 with stable outlook.
- **A budget deficit is not always bad for an economy for the following reasons.**
- **Stimulates demand.**
- If the increase in government expenditure will stimulate aggregate demand within the economy this may stimulate economic growth.
- E.g. Even with the budget deficit Ireland's economy has grown 7% in the last 12 months.
- **Self-financing deficit**
- With economic growth and increased consumer spending, government revenues may increase.
- Income tax revenue should increase as more people become employed and VAT revenue should rise as more goods and services are bought.
- Some people may consider it necessary to allow a budget deficit during a temporary downturn in economic activity in order to restart the economic growth cycle.

### Question 6

(a)

- **Job opportunities**



- There are a group of migrants known as economic migrants who chase economic booms around the globe.
- Currently Ireland is seeing a return of many economic migrants who fled the country following the economic crisis which began in September 2008.
- These migrants, many of whom are Irish Nationals are returning to Ireland due to the recent economic growth.
- **Political and religious persecution.**
- While in Ireland we enjoy a free press and the right to freedom, this cannot be said for the rest of the world.
- Many people, particularly in the Middle-East are forced to leave their country due violent political and religious conflict.
- Currently thousands of migrants from the middle East and Africa are running from the Syrian civil war and the threat of Isis.
- **Existence of high taxes.**
- High tax rates can encourage people to look elsewhere to countries where they will have higher take home pay and a higher standard of living.
- This is particularly true for the super-rich where the increase in take home pay can be enormous.
- E.g. Monaco is a tax-free state located at the south of France. Many of the people who live in Monaco are millionaires who use the state due to the tax-free scheme.
- **Effect on state services**
- A sudden increase in population can put additional pressure on schools, hospitals, roads and housing.
- In schools the language barrier can make it difficult to deliver an effective education to migrants who do not speak English.
- Additional pressure on hospitals and roads can result in a lower standard of living for current citizens of the nation who now must suffer additional traffic congestion and longer waiting lists.
- **Larger Domestic Market.**
- An increase in population represents an increase in the number of consumers in Ireland.
- This will result in an increase in demand for goods and services.
- This should lead to further economic growth and hence a further lowering in unemployment.
- Unemployment stat.
- **Increase the supply of labour.**
- As some of the migrants will be economic migrants, they should add to the labour market.
- They may also have the skills to fill the gaps in high demand sectors such as construction.
- This should relieve some of the current upward pressure on wage levels in Ireland.

(b)



- Arguments for:

- Larger Market

- The population of the E.U is approximately 500 million which is far larger than Irelands domestic market of approximately 5 million.
- Hence the E.U provides Increased opportunities for Irish firms to expand into new markets, increase profits, reduce costs and enjoy the benefits of large-scale production.
- Such benefits include bulk purchasing power.

- Ease of trade

- The common customs union in the E.U has resulted in a reduction in paper work needed to trade saves time and money.
- This makes it easier to do business between member states and allows ports to operate efficiently
- One of the consequences of Brexit could see the Channel Tunnel becoming clogged with trucks waiting to get through the ports of France and post-E. U UK.

- Foreign Direct Investment.

- If Ireland was not a member of the single market, many of the multinationals here today would not have located here.
- These multinationals use Irelands membership of the E.U market to access the European market tariff free.
- These multinationals support thousands of jobs in Ireland and are a major contributor of corporation tax.

- Arguments Against.

- Increased competition.

- Irish firms may come under more pressure from European firms just to hold a portion of the domestic market.
- Eastern European countries have far lower wage levels and hence can charge lower prices.
- Irish firms may not be able to compete with this due to our high wage rate.
- Ireland's current minimum wage is €9.55.

- Loss of sovereignty

- Considerable reduction in national sovereignty as Ireland's economic policies must be consistent with other policies being pursued in other member states.
- Ireland faces reduced autonomy in fiscal policies as EU directly influences fiscal policies.
- Recently we saw that the European Union continued to reject Italy's Capital Budget.

(c)

- Benefits

- Lives Saved





- Aid in the form of food, medical care and safe drinking water can be the difference between life and death.
- This is particularly true in African countries where the lack of rainfall can make it very difficult to grow anything.
- **Infrastructure.**
- Irish Aid has also been used to build vital public services like schools in LDCs.
- Schools can help educate the young and give them the skills to escape poverty.
- A skilful population can lead to the growth of an industrious region.
- **Challenges**
- **Aid may not 'trickle down'**
- The increased wealth may not trickle down to the people who need it most and economic growth may not result.
- In the case of some LDCs, the provision of foreign aid may end up in the hands of a ruling elite.
- Recently in Yemen the UN has asked the rebels to give aid to its citizens.
- **Implications of aid**
- Difficulty may arise when the aid must be repaid. Sometimes the aid adds to some LDCs already high national debt and results in difficulties when repaying, thereby hindering economic growth.
- Some countries have conditions attached to the aid which may limit the economic choices of future governments.
- The US gave aid to Brazil under strict conditions which it has used to exploit the natural resources of the country.

### Question 7

(a)

- **Economic Growth**
- In 2018, GDP is expected to grow by 4.8% ([ESRI Spring '18 Quarterly Economic Comment](#))
- Strong domestic consumption and investment along with are the main factors underpinning this growth. ([ESRI](#))
- Ireland is the fastest growing economy in EU, according to the [European Commission](#).
- **Unemployment**
- Unemployment averaged 6.7% in 2017 and is expected to decline to 5.4% in 2018 and 4.5% in 2019. ([ESRI Spring 2018 Quarterly Economic Comment](#)).
- Economists consider an unemployment figure of 4% to be 'full employment'
- As the country approaches 4%, this will put strain on the labour supply and result in upward pressure on wage rates.



- **Rate of inflation.**
- CPI 0.5% higher in Feb compared with Feb 2017 (CSO March 2018)
- The most notable changes in the year were increases in *Housing, Water, Electricity, Gas & Other Fuels* (+6.4%),
- This is mainly due the rising rents as a result of the housing market.
- However, across the E.U prices have not risen despite the recovery and the ECB are likely not to raise interest rates until well into the next year (Central Bank)
- **National Debt.**
- The nominal general government gross debt (GG Debt) stood at €201.3 billion at the end of 2017(CSO Oct 2018)
- This equated to 68.7% of GDP
- Though debt is falling as a % of GDP, overall debt has fluctuated with government borrowing.

## (B)

- **Citizens**
- **Provide protection to consumers**
- The Central Bank monitors financial institutions, giving depositors confidence that their deposits and investments are safe.
- This allows customers to have confidence in the financial system.
- Recently, the Central Bank stopped many banks who were overcharging their customers i.e. the tracker mortgage scandal.
- **Less need for government intervention**
- If banks are stable and promote savings and investment, then they become more profitable.
- It also means that there is a reduced risk of tax payer funds being needed (for possible bailouts).
- This can reduce the need for austerity measures in the future.
- **The Banking Industry**
- **Investor Confidence**
- Close monitoring of banks will give assurance to investors that their investments are safe.
- The banks can use these funds to create sustainable profits for their shareholders.
- This avoids the boom bust cycle where banks make great profits during booms but then lose all their investors' money in busts.
- **Employment Security**
- Effective regulation provides stability to the banking industry.



- Therefore, employees should have more permanent employment and their likelihood of being made redundant during an economic downturn should be less.
- This is because with correct regulation, banks should be less prone to shocks such as in 2008.

(c)

- **Increased demand for housing.**
  - Faster than expected economic recovery has boosted the demand for housing, both public and private.
  - A priority is to ensure the delivery of 25,000 new houses per annum by the end of this decade so as to better align demand and supply in the market.
  - An increase in capital expenditure, if some of it is dedicated to housing, should help resolve the crisis.
- **Promote balanced regional development.**
  - The government's aim is to spread economic growth more evenly and hence address some of the regional imbalances that have emerged in recent years
  - This is done by positively discriminating in favour of these undeveloped regions such as the west.
  - E.g. Bringing effective broadband to the west.
- **Need for social infrastructure.**
  - The additional expenditure could be used to provide modern technologies to reduce pollution and carbon emissions.
  - This could go on to develop sustainable energy supply into the future
  - e.g. more electric car charging points
  - Ireland has climate change commitments to the U.N which it is currently behind on.

(ii)

- **Could be inflationary**
  - The increased spending could lead to an overheated economy.
  - The increased spending is likely to create additional jobs, fuelling demand.
  - excessive rapid growth can lead to inflation and to escalating property prices.
  - Currently there is rising construction inflation.
  - According to the SCSi construction prices have risen by over 6% in the past year.
- **Unbalanced regional development.**
  - One of the aims of the current government is to reduce regional differences.
  - This is highlighted in the long-term Ireland 2040 plan.
  - If the expenditure is on capital projects in urban areas, particularly Dublin, then the disparity will increase.



### Question 8

(a)

- Part(a) is maths and the marking Scheme is a perfect reference for the layout.

(b)

- **Benefits**
- **Creates employment**
- 9 of the top 10 global companies have operations in Ireland.
- While these firms employ well over 100,000 people in Ireland, they have allowed other small firms to grow.
- E.g. Restaurants near the offices catering for corporate events etc.
- **Effect on government revenue MNCs contribute to Corporation Tax.**
- By employing people, they help reduce social welfare spending (Job Seekers Benefit)
- However there has been cases where the government have given special treatment to these MNC's (Apple €13bn in taxes)
- **Challenges**
- **Effects on Ireland if they re-locate**
- If they decide to move out of Ireland, then the effects on the local and national economy can be disastrous.
- They hold no loyalty to Ireland and are here simply for the low Corporation Tax.
- E.g. When Dell left limerick in 2009 with the loss of 2000 jobs.
- **Competition with Irish firms**
- Some MNCs dominate the market, driving out locally-based business enterprises.
- Irish companies may be losing out on attracting graduates to their firm due to high wage levels these MNC's can afford.
- It is also known that some MNC's offer the best working conditions out there
- E.g. Google employees in Dublin are fed for free.
- This can be very difficult for small domestic I.T firms to compete with.

(c)

- **Fines if Targets not met.**
- Ireland will have to face substantial fines if it does not reach its climate change goals.
- There is an opportunity cost involved with these fines
- E.g. instead of paying the fines, the money could have gone towards actually protecting the environment.
- **Increased public awareness**



- Citizens are more aware now of the need to protect the environment hence pressure is being applied to governments to fulfil their social responsibility to protect its citizens.
- This is mainly due to television personalities like Sir David Attenborough and Leonardo Di Caprio who have highlighted the destruction of the environment by humans
- If governments don't please their citizens, it is unlikely that they will be re-elected.
- **The cost of climate change**
- There has been a surge in storms in Ireland in the last number of years.
- Examples include the snow from 'The Beast from the East' and the hurricane 'Ophelia'
- These storms will only get worse if climate change continues.
- These storms cause damage which in some cases the government must repair.
- So, to reduce the cost of these storms the government must protect the environment.

(ii)

- **Individuals**
- **Cleaner methods of transport.**
- Individuals could consider switching to electric cars.
- Electric cars are supported by the government under the SEAI grant scheme and they also avail of vrt discounts.
- Employees could use the cycle-to-work scheme which would reduce vehicle emissions and congestion.
- The cycle to work scheme allows employees to save up to 52% off the purchase of a new bike.
- **Firms**
- **Reduce use of plastic.**
- Many coffee shops are now moving away from Disposable coffee cups and lids.
- Instead they encourage customers to bring own reusable cups by offering discounts.
- Starbucks has recently introduced decomposable straws into its stores.
- Other stores are simply trying to reduce the amount of packaging they use.
- Most video games have the manual built into the disc, so they don't waste paper printing it.
- **The Irish Government**
- **Investment in alternative transport**
- The government could add more charge points for electric cars as this is seen as one of the major drawbacks.
- The buses could be changed from their standard diesel and petrol engines to hybrid models.



- The new overhaul of the Dublin bus network will hopefully increase the number of people choosing to use the bus in Dublin