The final push for CAO points...

The Dublin School of Grinds is running 6-hour crash courses at the end of May and the beginning of June. These courses give students the best possible advantage as they prepare for the all-important State Examinations. One last ounce of effort could make all the difference.

Here is how these courses will benefit you:

- They will offer students one last opportunity to avail of expert teaching before the State Examinations
- They will provide students with a final boost of confidence before exam day
- They will give students an exam strategy plan to help them maximise their grade on the day

Note: At these courses our teachers will predict what questions are most likely to appear on your exam paper. These questions will be covered in detail and our teachers will provide you with model A1 answers.

FEES: €160 PER COURSE

To book, call us on 01-442 4442 or book online at www.dublinschoolofgrinds.ie

Crash Courses Timetable

<table>
<thead>
<tr>
<th>6th Year</th>
<th>Subject</th>
<th>Level</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>H</td>
<td></td>
<td>Sunday 29th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Biology</td>
<td>H</td>
<td></td>
<td>Saturday 28th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Business</td>
<td>H</td>
<td></td>
<td>Sunday 29th May</td>
<td>2pm - 8pm</td>
</tr>
<tr>
<td>Chemistry</td>
<td>H</td>
<td></td>
<td>Saturday 4th June</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Economics</td>
<td>H</td>
<td></td>
<td>Saturday 28th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>English</td>
<td>H</td>
<td></td>
<td>Sunday 29th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>English</td>
<td>H</td>
<td></td>
<td>Saturday 4th June</td>
<td>9am - 3pm</td>
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<tr>
<td>French</td>
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<td>Saturday 4th June</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Geography</td>
<td>H</td>
<td></td>
<td>Saturday 28th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Irish</td>
<td>H</td>
<td></td>
<td>Saturday 4th June</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Maths Paper 1</td>
<td>H</td>
<td></td>
<td>Saturday 4th June</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Maths Paper 2</td>
<td>H</td>
<td></td>
<td>Sunday 5th June</td>
<td>9am - 3pm</td>
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<tr>
<td>Maths</td>
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<td>Saturday 28th May</td>
<td>9am - 3pm</td>
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<tr>
<td>Maths</td>
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<td></td>
<td>Saturday 4th June</td>
<td>9am - 3pm</td>
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<tr>
<td>Physics</td>
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<td>Saturday 28th May</td>
<td>9am - 3pm</td>
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<tr>
<td>Spanish</td>
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<td></td>
<td>Sunday 5th June</td>
<td>9am - 3pm</td>
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<tr>
<td>Maths</td>
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<td>Sunday 29th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Maths</td>
<td>O</td>
<td></td>
<td>Sunday 29th May</td>
<td>9am - 3pm</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>3rd Year</th>
<th>Subject</th>
<th>Level</th>
<th>Date</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Business Studies</td>
<td>H</td>
<td></td>
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<td>9am - 3pm</td>
</tr>
<tr>
<td>English</td>
<td>H</td>
<td></td>
<td>Sunday 5th June</td>
<td>9am - 3pm</td>
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<tr>
<td>French</td>
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<td></td>
<td>Sunday 29th May</td>
<td>9am - 3pm</td>
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<tr>
<td>Irish</td>
<td>H</td>
<td></td>
<td>Sunday 29th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Maths</td>
<td>H</td>
<td></td>
<td>Sunday 29th May</td>
<td>9am - 3pm</td>
</tr>
<tr>
<td>Science</td>
<td>H</td>
<td></td>
<td>Saturday 4th June</td>
<td>9am - 3pm</td>
</tr>
</tbody>
</table>

Please note that all courses will take place at our Learning Centre at The Primary School in Oatlands, Stillorgan, Co. Dublin.
Since 1999 Market Structures has always appeared as at least one full long question in the leaving cert. (18.75%). This chart below outlines the marks allocated on each section by year.

| Market Structures     | 15 | 14 | 13 | 12 | 11 | 10 | 09 | 08 | 07 | 06 | 05 | 04 | 03 | 02 | 01 | 00 | 99 |
|-----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Monopoly              | 75 | 50 | 10 | 45 | 75 | 75 | 75 | 10 | 45 | 75 | 75 | 75 | 75 | 10 | 45 | 75 |
| Oligopoly             | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 10 | 45 | 75 | 75 | 75 | 75 | 10 | 45 | 75 |
| Imperfect Competition | 75 | 25 | 75 | 75 | 75 | 65 | 75 | 75 | 15 | 75 | 75 | 75 | 75 | 15 | 75 | 75 |
| Perfect Competition   | 65 | 30 | 75 | 75 | 75 | 15 | 75 | 75 | 15 | 75 | 75 | 75 | 75 | 15 | 75 | 75 |

Checklist for mastering this topic

1. Know the features / assumptions for each market structure.
2. Make sure you can draw each graph.
3. Make sure you can explain the long run equilibrium for each graph.
4. You would be mad going into this exam without covering Oligopoly.

The four areas above are essential to achieving a high grade in this section.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Monopoly</td>
<td>3</td>
</tr>
<tr>
<td>Oligopoly</td>
<td>29</td>
</tr>
<tr>
<td>Imperfect Competition</td>
<td>45</td>
</tr>
<tr>
<td>Perfect Competition</td>
<td>63</td>
</tr>
</tbody>
</table>
Why focus on market structures?

See below the examiners report from the 2013 paper. The average mark for market structures is the highest. On every examiners report issued to date (with the exception of 1999) the question on market structures has always been the highest answered question.

<table>
<thead>
<tr>
<th>Question No.</th>
<th>% of Candidates</th>
<th>Order of Popularity</th>
<th>Average % Mark</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A</td>
<td>100%</td>
<td>Compulsory section</td>
<td>70%</td>
<td>Questions across the syllabus</td>
</tr>
<tr>
<td>Section B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>80</td>
<td>2</td>
<td>59</td>
<td>Demand/Supply</td>
</tr>
<tr>
<td>2</td>
<td>92</td>
<td>1</td>
<td>74</td>
<td>Monopoly</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>8</td>
<td>54</td>
<td>Labour/Karl Marx</td>
</tr>
<tr>
<td>4</td>
<td>54</td>
<td>4</td>
<td>62</td>
<td>Budget/taxation/capital expenditure</td>
</tr>
<tr>
<td>5</td>
<td>42</td>
<td>5</td>
<td>62</td>
<td>National Income/Keynes</td>
</tr>
<tr>
<td>6</td>
<td>29</td>
<td>6</td>
<td>63</td>
<td>Banking/Inflation</td>
</tr>
<tr>
<td>7</td>
<td>26</td>
<td>7</td>
<td>56</td>
<td>International Trade/Euro</td>
</tr>
<tr>
<td>8</td>
<td>61</td>
<td>3</td>
<td>64</td>
<td>Unemployment/national debt/ageing population</td>
</tr>
</tbody>
</table>
Monopoly → A market structure in which there is only one producer/seller

Examples of Firms with Monopolies

Assumptions of Monopolies

One firm in the industry
- Only one firm exists within the industry so there is no distinction between the firm and industry.
- This firm supplies the output of the entire industry.

Controls price or output
- A firm can control either price or output, but not both.
- If it sets the price the output produced will be determined by consumers.
- If it sets the output the price will be determined by the market.

Profit maximisation
- It is possible for the firm to earn SNP’s in both the short run and long run.
- A firm aims to make maximum profits and it achieves this where MC = MR

Barriers to entry
- If a monopoly market structure is to exist in the long run there cannot be freedom of entry into the industry.
- These barriers prevent the entry of new firms into the industry, which would threaten the position of the monopolist.
1. **Legal / Statutory Monopoly**  
   Other firms may not be allowed into the industry because the government gives a firm the sole right to supply a particular good or service.

2. **Ownership of a patent / copyright**  
   If a firm has the sole right to a manufacturing process then no other firm can compete with it. Other firms are not allowed to use this patent until the time period for it has expired.

3. **Large capital investment**  
   In some industries the minimum size of a firm required to operate efficiently is so large that there is no room for competitors once one firm has established itself. Competitors are discouraged from entering because of the high initial start-up costs.

4. **Mergers / takeovers**  
   A firm may ensure its survival by taking over other rival firms in the same line of business, such that it becomes a monopolist and no competition exists within the industry. 

5. **Monopolies based on fear, force or threats**  
   An individual / firm may stop other individuals/firms providing similar goods/services by means of instilling fear into potential entrants.

6. **Brand proliferation**  
   A firm may gain monopoly power if, through its advertising, consumers are convinced that there is no suitable alternative to its particular brands.
Monopoly – A summary of the Market

1. The Monopolist does not produce where AC is at a Minimum i.e. the Monopolist is inefficient.

2. The monopolist earns SNPs in both Short and Long Run due to barriers of entry.

3. The Monopolist can control price or output but not both.

4. SNPs do not always mean there is exploitation. SNPs may be due to lower production costs due to large scale production. (Economies of Scale)

5. Consumers have no choice.

6. There is no pressure on the Monopolist to introduce new goods or to undertake Research and Development.

7. The Monopolist may be able to separate parts of the market and charge a higher price to one sector than the other.

8. Monopolies avoid wasteful duplication of resources.

9. Monopolists do not have to advertise.

DON’T LEARN THESE OFF (NO NEED)
2015 Section B – Question 2A – 35 Marks

(i) State and explain two examples of barriers to entry facing firms wishing to enter a monopoly market.

(ii) Explain, with the aid of a diagram, the long run equilibrium position of a monopolist. Identify on your diagram the profit the monopolist makes.
2015 Section B – Question 2B – 25 Marks
A monopolist can increase its profits by engaging in price discrimination.
(i) Explain the concept price discrimination, using a suitable example.
(ii) State and explain the market conditions necessary for price discrimination to take place.

2015 Section B – Question 2C – 15 Marks
The Commission for Energy Regulation (CER), Ireland’s independent energy regulator, has been appointed as the independent economic regulator for Ireland’s public water services. Discuss whether or not Irish Water (Uisce Éireann), Ireland’s new water utility company, should be regulated.

Note: The marking scheme for this question is included at the end of the notes on this section.
Technology companies such as Apple and Samsung are currently involved in legal disputes regarding patents on various aspects of their smartphones. When a company wins a patent dispute it may become the sole producer using the patented technology.

(i) Explain three barriers to entry, other than patents, that can exist in business.

(ii) Outline two reasons why monopolies may not be in the public interest.

2. (i)

<table>
<thead>
<tr>
<th>1. Government Regulation / Legal restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The government may grant a company the sole right to supply a good or service so that there is a legal restriction on competition e.g. Dublin Bus routes / rail services.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Trade Agreements &amp; Collusion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies may enter into trade agreements with other suppliers (collude with them) so that no other company finds it possible to supply the commodity to a particular segment of the market.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Ownership of raw materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>A company may acquire the sole right to the available raw materials thereby becoming a monopoly in that particular market e.g. an oil exploration company.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Industry requires a large investment in capital / High start-up costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>For some industries the capital required to get established in the industry is so large that only the company which can raise the necessary capital can operate in the market. Competitors are discouraged from entering because of the high initial start-up costs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Mergers / Takeovers</th>
</tr>
</thead>
<tbody>
<tr>
<td>By merging with a competitor or buying out the competitor a company may become a monopoly supplier in that industry.</td>
</tr>
</tbody>
</table>
(ii) Outline two reasons why monopolies may not be in the public interest.

2. (ii)
   1. **Higher Prices**
   Monopolies can charge higher prices, compared to perfect competition, because there is no competition.

   2. **Lower output produced**
   Monopolies with similar costs to a firm in perfect competition may produce a lower output compared to a firm in Perfect Competition.

   3. **Inefficiency/Wasteful of resources**
   Monopolies not producing at the lowest point of the AC curve results in waste of scarce resources.

   4. **Lack of innovation**
   The lack of competition means that a Monopolist does not have to innovate or develop new products or services.

   5. **Loss making state monopolies**
   If the monopoly is state run and is loss making e.g. CIE then these losses are borne by the taxpayers in the form of higher taxes

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**2005 – Short Questions - Question 7 – 17 Marks**

“When a firm produces at a level of output at which marginal cost is greater than marginal revenue the firm is maximising profit (or minimising losses)”. True / **False**

<table>
<thead>
<tr>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>The extra cost of producing further units of output is greater than the extra revenue generated therefore the firm could increase its profits by producing less output. The increased output adds more to cost than to revenues earned. Profits are maximised where MC=MR.</td>
</tr>
</tbody>
</table>
(b) Explain, with the aid of a diagram, the long run equilibrium position of a monopoly firm.

Diagram: 10 marks graded

1. **Super Normal Profits.**
   - This firm is earning SNP’s – represented by the shaded area above.
   - They are earning SNP’s because AR > AC and they can continue to earn SNP’s because barriers to entry exist.

2. **Price charge & /Output produced**
   - The firm produces output Q1 and sells it at price P1 on the market

3. **Equilibrium**
   - Occurs at point E where
   - MC = MR and MC is rising and cuts MR from below.

4. **Cost of production**
   - The cost of producing this output shown at point C.

5. **Waste of Scarce Resources**
   - Because the firm is not producing at the lowest point of the AC curve it is wasting scarce resources.
2010 Section B – Question 2A – 25 Marks

(i) State and explain three assumptions underlying the theory of monopoly.

(ii) Outline two possible advantages of monopoly as a market structure.

### Assumptions of Monopoly

#### One firm in the industry
- One firm exists within the industry so there is no distinction between the firm and industry.
- One firm supplies the output in the entire industry.

#### Controls price or output
- A firm can control price or output but not both.
- If it sets the price the output produced will be determined by consumers.
- If it sets the output the price will be determined by the market.

#### Profit maximisation
- It is possible for the firm to earn SNP’s in both the short run and long run.
- A firm aims to make maximum profits and it achieves this when MC = MR

#### Barriers to entry
- If a monopoly market structure is to continue into existence into the long run there cannot be freedom of entry into the industry.
- These barriers prevent the entry of new firms into the industry to threaten the position of the monopolist.

### 3 Points X 5 Marks

#### Advantages of Monopoly as a Market Structure

<table>
<thead>
<tr>
<th>1. Economies of Scale</th>
<th>Cost advantages that a business obtains due to expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Guarantee supply of Product / Service</td>
<td>Monopolies ensure the provision of services. E.g. Utilities (ESB)</td>
</tr>
<tr>
<td>3. Employment</td>
<td>Iarnród Éireann employs circa 4,000 employees</td>
</tr>
<tr>
<td>4. Reduced use of scarce resources</td>
<td>If two companies were to vy for scarce resources, duplication of resources would occur. Monopolies eliminate this inefficiency.</td>
</tr>
<tr>
<td>5. Potential for Innovation / R &amp; D</td>
<td>The SNP’s that are earned by monopolies can be re-invested into R&amp;D, which will lead to consumers getting better products.</td>
</tr>
</tbody>
</table>
2010 Section B – Question 2B – 20 Marks

Iarnród Eireann (Irish Rail) is the state monopoly in the provision of rail transport in Ireland. It operates a system of price discrimination in setting some of its prices.

(i) Explain the underlined term, giving one example as practiced by Iarnród Eireann.

(ii) State and explain three conditions necessary for price discrimination to take place.

**Price Discrimination: 6 marks**
When a good or service is sold to different consumers at varying prices. The price difference is not due to difference in the cost of production.

**Example: 2 marks**
- A student being charged a lower rate for travel from Cork to Dublin than another passenger

**Conditions necessary for Price Discrimination**

1. **Monopoly Power**
If freedom of entry existed into the industry, competitors would enter where the firm was charging the higher price and earning SNP and this would continue until only normal profit was being earned.

2. **Separation of Markets**
The good bought in the low priced market cannot be offered for resale in the higher priced market. If it was not possible to separate the markets then the above would occur until no price difference existed.

3. **Consumer Indifference**
The difference in price may be so small that consumers are indifferent and so don't mind paying the slightly higher price.

4. **Lack of Awareness by Consumers**
Consumers may be unaware that the good is being sold elsewhere at a lower price.

5. **Consumer Attitudes to the Goods**
A consumer may be willing to pay a higher price for a good which they consider to be in fashion.
2008 Section B – Question 2A – 25 Marks
Explain, with the aid of a diagram, the long run equilibrium position for a monopoly firm which seeks to maximise profits.
2008 Section B – Question 2B – 20 Marks

(i) Define price discrimination. (8m)

**Price Discrimination: 6 marks**

When a good or service is sold to different consumers at varying prices. The price difference is not due to difference in the cost of production.

**Example: 2 marks**

- A student being charged a lower rate for travel from Cork to Dublin than another passenger
- Consumers being charged different rates for peak and off-peak travel.

(ii) Explain three types of price discrimination, using suitable examples in each case. (12m)

**THREE TYPES OF PRICE DISCRIMINATION**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>EXPLANATION</th>
<th>EXAMPLE</th>
</tr>
</thead>
</table>
| 1st Degree | 1. A monopolist identifies those consumers who are prepared to pay a higher price and consequently charges them that higher price.  
               2. This type of price discrimination can occur in one-to-one confidential services. | Doctor, Lawyer              |
| 2nd Degree | 1. A monopolist gives discounts for bulk buying                             | Musgraves                   |
| 3rd Degree | 1. Consumers have different price elasticities of demand.                   | Cinema tickets (Students / OAP’s) |
|           | 2. Consumers with inelastic demand pay a higher price than consumers with elastic demand |                             |

**3 Explanations at 4 Marks each graded (Must Include Example)**
2008 Section B – Question 2C – 30 Marks

(i) State and explain **three** barriers to entry facing entrants to a monopoly market. (15)

1. 

2. 

3. 

4. 

(ii) **Deregulation** of markets (i.e. allowing more suppliers of a good or service into the market) is a continuing development in the Irish economy e.g. energy, mobile phones, transport etc. **Explain** how deregulation could affect:

(i) Consumers of the good/service; (ii) Employees in the industry; (iii) Profits of existing firms.

**EFFECTS OF DEREGULATION**

<table>
<thead>
<tr>
<th>Consumers of the Good / Service</th>
<th>1) Lower Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2) Increased availability of service</td>
</tr>
<tr>
<td>Employees in the industry</td>
<td>1) Loss of employment in existing businesses</td>
</tr>
<tr>
<td></td>
<td>2) Job opportunities with new suppliers</td>
</tr>
<tr>
<td></td>
<td>3) Changed working conditions</td>
</tr>
<tr>
<td>Profits of existing firms</td>
<td>1) Decreased profits</td>
</tr>
</tbody>
</table>
2004 – Section B – Question 1A – 25 Marks
Explain, with the aid of a diagram, the long run equilibrium position of a monopoly firm.
2004 – Section B – Question 1B – 15 Marks
If firms wish to enter a monopoly market they will face barriers to entry. Explain **THREE** of these barriers.

<table>
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<th>1.</th>
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<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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</tbody>
</table>

2004 – Section B – Question 1C – 15 Marks
If a monopoly firm wishes to engage in price discrimination, certain conditions must apply. State and explain **THREE** of these conditions.

<table>
<thead>
<tr>
<th>1.</th>
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<tbody>
<tr>
<td>2.</td>
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<td>3.</td>
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<tr>
<td>4.</td>
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</tbody>
</table>

2000 – Section B – Question 2A – 10 Marks
(a) Define ‘**price discrimination**’ and give **ONE** example. (10 marks)

|  |  |  |  |
2004 – Section B – Question 1D – 20 Marks
Irish semi-state transport companies are facing increasing competition.
Discuss ONE possible advantage and ONE possible disadvantage of this development for:
1. Consumers; AND
2. Employees of semi-state transport companies.

<table>
<thead>
<tr>
<th>Consumers</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td><strong>Disadvantages</strong></td>
<td></td>
</tr>
<tr>
<td>Cheaper prices, due to competition.</td>
<td>Uncertain transport supply.</td>
<td></td>
</tr>
<tr>
<td>More choice.</td>
<td>Cancellation of loss-making routes.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employees</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td><strong>Disadvantages</strong></td>
<td></td>
</tr>
<tr>
<td>Job openings.</td>
<td>Pay cuts.</td>
<td></td>
</tr>
<tr>
<td>Possibly to avail of redundancy package.</td>
<td>Less job security.</td>
<td></td>
</tr>
</tbody>
</table>

2000 – Section B – Question 2B – 20 Marks
State and explain THREE conditions which must exist to enable a firm to practise price discrimination.
2000 – Section B – Question 2B – 30 Marks
A firm is a monopolist in the home market and exports to perfectly competitive markets abroad. It seeks to maximise profits. Explain, with the aid of a clearly labeled diagram, the long run equilibrium of this price discriminating monopolist.
Question 2A – 25 Marks
Explain with the aid of a diagram, the long run equilibrium position of a monopoly firm.

Question 2B – 20 Marks
Outline THREE barriers to entry faced by a firm wishing to enter a monopoly market.

Question 2C – 30 Marks
(i) Define price discrimination and give ONE example.
(ii) State and explain THREE conditions which must exist to enable a firm to practice price discrimination.
2015 – Section B – Question 2 – 75 Marks

2. (a) (i) State and explain two examples of barriers to entry facing firms wishing to enter a monopoly market.
(ii) Explain, with the aid of a diagram, the long run equilibrium position of a monopolist. Identify on your diagram the profit the monopolist makes. (35)

(b) A monopolist can increase its profits by engaging in price discrimination.
(i) Explain the concept price discrimination, using a suitable example.
(ii) State and explain the market conditions necessary for price discrimination to take place. (25)

(c) The Commission for Energy Regulation (CER), Ireland’s independent energy regulator, has been appointed as the independent economic regulator for Ireland’s public water services.

Discuss whether or not Irish Water (Uisce Éireann), Ireland’s new water utility company, should be regulated. (15)

[75 marks]

The Marking scheme is on the next page.
Q2 Monopoly, Price Discrimination & Irish water

(a) (i) State and explain two examples of barriers to entry facing firms wishing to enter a monopoly market.

(ii) Explain, with the aid of a diagram, the long run equilibrium position of a monopolist. Identify on your diagram the profit the monopolist makes.

(i) Barriers to entry facing firms wishing to enter a monopoly market.

<table>
<thead>
<tr>
<th>Legal / statutory restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The government may grant a firm the sole right to supply a good or service so that there is a legal restriction on competition e.g. Irish rail services or government legislation regarding licences.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trade Agreements / market sharing agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms may enter into trade agreements with other suppliers (collude with them) so that no other firm can supply the commodity to a particular segment of the market.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership of a key resource / raw materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>A firm may acquire the sole right to the available raw materials thereby becoming a monopoly in that particular market e.g. an oil exploration company.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry requires a large investment in capital / High start-up costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>For some industries the capital required to get established in that industry is so large that only the firm which can raise the necessary capital can operate in the market. Competitors are discouraged from entering because of the high initial start-up costs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mergers / Takeovers</th>
</tr>
</thead>
<tbody>
<tr>
<td>By merging with a competitor or buying out the competitor a firm may become a monopoly supplier in that industry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Limit pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A firm may use limit pricing (selling at exceptionally low prices) to force new entrants out of the industry so that it retains monopoly power.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand dominance of a large supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>A firm may gain monopoly power, if through its advertising consumers are convinced that there is no suitable alternative to its particular brands.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Natural monopoly / economies of scale / technological superiority</th>
</tr>
</thead>
<tbody>
<tr>
<td>A natural monopoly arises because a single firm can supply a good or a service to an entire market at a smaller cost than could two or more firms. A firm that has superior technology can become a monopolist. However, over time competitors may enter the market e.g., Intel had market dominance until AMD entered the market.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership of a patent / copyright</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a firm has the sole right to a manufacturing process then no other firm can compete with it. A patent (i.e. used to protect the intellectual property rights of firms) acts as a barrier to entry. Other firms are not allowed to produce the good until the patent has expired.</td>
</tr>
</tbody>
</table>

**2 points at 5 marks (2 + 3)**
(ii) Explain, with the aid of a diagram, the long run equilibrium position of a monopolist. Identify on your diagram the profit the monopolist makes.

(35)
(b) A monopolist can increase its profits by engaging in price discrimination.

(i) Explain the concept price discrimination, using a suitable example.
(ii) State and explain the market conditions necessary for price discrimination to take place.

(i) Explain the concept price discrimination, using a suitable example.

Explanation:
When the same goods or services are sold to different consumers (in different markets) at varying ratios between marginal cost and the price / the price difference is not due to differences in the cost of production.

8 marks

Example:
By location (different regions / countries different prices (e.g. Netflix more expensive in Ireland than in the UK). By demographic (child fares / OAP concessions / students at cinema)
By time, different rates at different times (Rail fares at commuter times, at other times)
By status (existing club members may be charged different prices to new members)

2 marks

(ii) State and explain the market conditions necessary for price discrimination to take place.

Some monopoly / market power
Firms must have some ability to alter the market price by exercising control over its demand, supply or both. If freedom of entry existed into the industry, competitors would enter where the firm was charging the higher price and earning SNP and this would continue until only normal profit was being earned.

Separation of markets / limited ability to sell the product
The markets must be distinct and separate. This ensures that the good bought in the low priced market cannot be offered for resale in the higher priced market (no resale between markets). If this was not the case the transfer of the goods bought in the low price market to the high price market would make the charging of different prices in the two markets impossible. Dental/Doctor treatments cannot be sold.

Different consumer price elasticities of demand / different demand curves
Different consumers display different sensitivities to price i.e. they have different price elasticities of demand. Consumers with the greater PED are charged the lower prices for their goods e.g. students are assumed to have lower incomes and so are not in the position to pay the full price for certain goods and services.

3 conditions at 5 marks each (2 + 3)
(c) The Commission for Energy Regulation (CER), Ireland’s independent energy regulator, has been appointed as the independent economic regulator for Ireland’s public water services.

Discuss whether or not Irish Water (Uisce Éireann), Ireland’s new water utility company, should be regulated. (15)

Possible responses include:

**Arguments why Irish Water should be regulated**

**Pricing: ensure that consumers are charged a fair price**
As water is a basic human right it should be provided to consumers at a fair price. The regulator should prevent the abuse of monopoly power and so protect the interests of water customers and ensure that they are not exploited. By approving and regulating Irish Water’s proposed revenue allowances and tariff structures consumers can be protected.

**Quality: provision of clean water**
Regulation should ensure that water services are delivered in a safe and secure way / the water provided should be clean and an uninterrupted supply should be guaranteed.

**Invest in infrastructure**
To ensure Ireland has sustainable water supply and wastewater treatment service provision it must invest in infrastructure to support the development of the service into the future e.g. remove the lead in water pipes.

**Protection of the environment**
Irish water is responsible for wastewater treatment. This will ensure that the environment is protected and thus future citizens are safeguarded etc.

**Arguments why Irish Water should not be regulated**

**Laissez faire policies should be pursued**
The government should not interfere in the market. By regulating the market this may discourage potential investors in Ireland as they see their profit motive may attract negative attention.

**Prices should be determined by the market**
The price of water should be determined by the market. This should ensure that the full economic price is charged for the service and no political interference should be considered.

**Irish Water can generate funds for innovation**
Irish Water will be able to generate funds which would allow the company innovate in production / distribution methods / generate funds for investment in infrastructure etc.

3 reasons at 5 marks each (2 + 3)
# Monopoly

## Assumptions

- One firm in the industry
- Controls price or output
- Profit maximisation
- Barriers to entry

## Short & Long Run

- Why is it the same in the short run and the long run?
  - Barriers to entry
  - How can state monopolies be made more efficient?
  - More emphasis on profits / cutbacks / deregulation

## Barriers to entering a monopolistic market

- Legal Monopoly
- Patent
- Large capital investment
- Takeovers

## Monopoly as a Market Structure

### Advantages
- Employment
- Economies of Scale
- Guaranteed Supply

### Disadvantages
- Inefficient
- No Pressure to innovate
- Exploited customers

### Price Discrimination
- When the same goods/services are sold to consumers at different prices and there is no difference in the costs of production.

### Deregulation
- A form of intervention which involves the government changing laws to remove barriers to entering markets
- Effects of deregulation:
  - Lower Prices / Increased efficiency / Redundancies and job opportunities / Increased supply

---

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Monopoly

Assumptions

Short & Long Run

Why is it the same in the short run and the long run?

How can state monopolies be made more efficient?

Barriers to entering a monopolistic market

Monopoly as a Market Structure

Advantages

Disadvantages

Price Discrimination

Conditions necessary for price discrimination

Deregulation

Effects of deregulation
OLIGOPOLY

Oligopoly – A market structure in which a small number of firms producing the same good or close substitutes and who take account of each other’s reaction.

Key Features of an Oligopolistic Market

1. Few Sellers in the industry
Because of this each seller can influence the price of the commodity and/or the output sold.

2. Interdependence between firms
Firms in oligopoly do not act independently of each other. They will each take into the account the likely reactions of their competitors; hence prices tend to be rigid.

3. Product Differentiation occurs
The commodities which firms sell are close substitutes. Firms will engage in advertising to persuade consumers to buy their product rather than a competitor’s product.

4. Barriers to entry
These are common in an oligopolistic market as existing firms will wish to maintain their share of the market.

5. Collusion may occur
Firms within the industry may meet to control the output in the industry and/or control prices.

6. Non-price competition is more common than price competition
Due to the fear of how competitors will react, firms tend not to engage in price competition but rather they engage in non-price competition to gain consumers.
Objectives which firms in Oligopoly have

1. **Prevent government market intervention/interference**
   Firms may fear that the existence of supernormal profits would attract government intervention into the market and thereby restrict the firm’s activities.

2. **Discourage the entry of new firms into the industry**
   Firms may set prices at a low level which is intended to discourage the entry of new firms into the industry (limit pricing).

3. **Maximisation of sales / increased share of market**
   Once a minimum level of profit is earned to reward shareholders, provide funds for reinvestment etc. the firm may concentrate on maximising sales; increasing its share of the market.

4. **Maintain adequate profits**
   The owners of the business may prefer to earn stable/moderate levels of profits rather than constantly striving for large supernormal profits as this is what they are satisfied with.
Reasons why Consumers may prefer Price Competition

1. Lower prices / value for money
Consumers will benefit from availability of commodities at lower prices. Consumers will be able to get better value for their limited income.

2. Higher disposable income
With lower prices consumers will now have a higher disposable income, resulting in a better standard of living.

3. More choice
As consumers have a greater disposable income they can now choose how to spend this additional income.

4. Preferable to non-price competitive measure because:
Consumers pay for non-price competitive measures e.g. advertising; Offers may be unwanted / of little value; tokens may go unused etc.

Reasons why Consumers may prefer Non-Price Competition

1. Consumer loyalty rewarded
Consumers can, by shopping in selected stores, receive loyalty points which can be used as they wish.

2. Stability in prices
Non-price competition means prices will not be constantly changing and so consumers do not have to worry that they are losing out on bargains / may be better able to budget.

3. Better quality commodities / services
Firms may improve the quality of their commodities; offer better service and/ or after sales service to consumers.

4. Allows consumers to save and / or avail of ‘free’ gifts
With regular shopping consumers can ‘save’ their loyalty points for those time periods when they incur additional expenses.
The Kinked Demand Curve

**Explanation**

**Demand curve – AB**
If this firm increases its price others will leave their prices unchanged so this firm will lose many customers – this portion of the D/C is elastic.

**Demand curve – BC**
If this firm lowers its price others will match this price decrease so this firm will gain few additional customers – this portion of the D/C is inelastic.

**What is the long run equilibrium position of this firm?**
1. This firm is earning SNPs because AR exceeds AC or barriers to entry exist. (S)

2. The firm will produce Q1 and sell this output at price P1 (P)

3. **Equilibrium** occurs at point G where (a) MC = MR & (b) MC is rising. (E)

4. The firm’s cost of production is shown at point G. (C)

5. Should costs rise between points D & E then market price tends to remain constant at P1, this is also known as sticky pricing. (S)
What is the difference between explicit and implicit collusion?

1. Explicit collusion occurs when separate companies jointly decide a specific course of action by forming a cartel e.g. OPEC (Organisation Of Petroleum Exporting Countries). This collusion might include:
   a) **A fixed price** which applies to all firms in the cartel
   b) **A quota system** which limits production to certain agreed amounts, keeping prices higher than they should be.

2. Implicit collusion occurs when there is no formal agreement between firms but each firm recognizes that joint profits will be higher if firms behave as if they were a monopoly. A single firm will not reduce the prices of its output because it knows that such a move could result in a price war with smaller profits for all firms involved in the industry, firms therefore will compete by means of **non-price competition**.

Types of Collusion

1. Pricing Policy / Limit Pricing
   One firm, with the tacit agreement of others, could reduce prices forcing unwanted entrants out of the industry.

2. Production/output policy
   Firms could join together to limit output to certain agreed amounts.

3. Sales Territories.
   Firms could divide up the markets between them and agree not to compete in each other’s market segments.

4. Refusal to supply firms.
   Firms may not supply those firms who buy from firms not in the cartel.

5. Implicit Collusion
   Each firm recognises that behaving as if they were branches of a single firm their joint profits would be higher. So firms do not provoke their rivals by cutting prices. Instead they try to increase market share by engaging in non-price competitive measures.
2015 – Section A – Question 4 – 16 Marks

A high concentration ratio is a key feature of an Oligopolistic Market.

(a) Explain this statement and give one example.
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________

(b) Outline two ways oligopolists behave in the market:
(i)_____________________________________________________________________________________________________
________________________________________________________________________________________________________
(ii)_____________________________________________________________________________________________________
________________________________________________________________________________________________________

2013 – Section A – Question 4 – 16 Marks

4. (a) Collusion may be a feature of an oligopolistic market. Explain what is meant by ‘collusion’.
(b) Collusive practices may be undermined by price wars. Outline two benefits of price wars for the consumer.

4. (a) → Collusion is:

1. Lower prices / value for money
   - Consumers will benefit from the availability of commodities at lower prices.
   - Consumers will be able to get better value for their limited income.

2. Higher disposable income
   With lower prices consumers will now have a higher disposable income resulting in a better standard of living.

3. More choice
   As consumers now have a greater disposable income they can choose how to spend this additional income.
2011 – Section B – Question 2 – 25 Marks

A) Some Telecoms’ analysts believe the main mobile operators in Ireland – Vodafone, O2, Meteor and 3 – control an oligopoly and have little reason to make the market really competitive. (The Irish Times, November, 2010)

(i) Outline three key features of an oligopolistic market.

Firms in an oligopolistic market may have objectives other than profit maximisation.

(ii) Outline two objectives firms in oligopoly may have, other than achieving the maximum level of profits. (25)

1. Avoiding government intervention.
2. If managers are not shareholders, profit maximisation will be less important as managers won’t directly benefit from increased profits.
3. Limit pricing to discourage new competition.
4. Satisfactory profits.
2011 – Section B – Question 2b – 25 Marks
Using one clearly labelled diagram:
(i) Explain the shape of the ‘kinked’ demand curve facing a firm in oligopoly.
(ii) Explain the long run equilibrium position of this firm. (25)

2011 – Section B – Question 2c – 25 Marks
It is suggested that consumers prefer price competition in the market place, yet there are benefits for consumers arising from non-price competition.
(i) Explain two reasons why consumers may prefer price competition.
(ii) Describe two benefits to consumers of non-price competition. (25)

(i) 1. Consumer gets good at lower price.
2. Consumer has more disposable income.
(ii) 1. Consumers are rewarded for their loyalty (Loyalty cards)
2006 – Section B – Question 2 – 75 Marks

(a) State and explain THREE key features of an oligopolistic market. (15 marks)

(b) With the aid of ONE clearly labelled diagram: (35 marks)

(i) Explain the shape of the ‘kinked demand curve’ under oligopoly.
(ii) Explain the long run equilibrium position of a firm facing a ‘kinked demand curve’.
(iii) Explain what is meant by the term ‘rigidity of prices’ under a ‘kinked demand curve’.

Rigidity of prices: Firms in an oligopolistic market tend not to change their prices as raising their prices would lead to a huge fall in revenue. Equally, lowering their prices would not result in a significant rise in revenue. Hence, prices tend to stay rigid unless there is a sizeable cost increase.
(c) (i) Explain THREE types of collusion which may occur in an oligopolistic market.

(ii) Do you believe that the Irish retail market for banking services (e.g. personal current accounts.) operates under oligopolistic conditions? Explain your answer. (25 marks)

Yes. 1. Few sellers.
2. Interdependence.
3. Close substitutes.

2003 Section B – Question 2 – 75 Marks
(a) Outline THREE key features of an oligopolistic market and state ONE example of an oligopolistic market in Ireland. (20 marks)
(b) With the aid of ONE clearly labelled diagram:
(i) Explain the shape of the demand curve facing a firm in oligopoly.
(ii) Explain the relationship between this demand curve and the firm’s marginal revenue curve.
(iii) Explain the long run equilibrium position of this firm. (40 marks)

(c) Explain THREE methods by which firms in oligopolistic markets may collude. (15 marks)
75 Marks – 30 Minutes

(a) (i) State and explain three key features of an **oligopolistic market**.
(ii) Give two examples of industries considered oligopolistic in Ireland. *(20 marks)*

<table>
<thead>
<tr>
<th>Key Features of Oligopolistic Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Number of Firms</strong></td>
</tr>
<tr>
<td>2. <strong>Interdependence</strong></td>
</tr>
<tr>
<td>3. <strong>Price Leadership</strong></td>
</tr>
</tbody>
</table>

(b) With the aid of **one clearly labelled diagram**:
(i) Explain the shape of demand curve facing a form oligopoly.
(ii) Explain the relationship between this demand curve and the firms marginal revenue curve.

(iii) Explain the long run equilibrium position of this firm. (35 marks)

(c) Oligopolistic firms tend to engage in non-price competition.  
(i) Explain the underlined term. 
(ii) Outline two benefits of non-price competition to consumers.  
(iii) Outline two reasons why consumers prefer price competition. (20 marks)
75 Marks – 30 Minutes

(a) State and explain the key features of an oligopolist market. (25 marks)


(b) Using one clearly labelled diagram:
(i) Explain the shape of the demand curve facing a firm in oligopoly.
(ii) Explain the long run equilibrium position of this firm. (35 marks)


(c) Explain what is meant by the terms “rigidity of prices” in oligopoly. (15 marks)
Q2 Oligopoly

(a) Some Telecoms’ analysts believe the main mobile operators in Ireland – Vodafone, O2, Meteor and 3 – control an oligopoly and have little reason to make the market really competitive.

(The Irish Times, November, 2010)

(i) Outline three key features of an oligopolistic market.
Firms in an oligopolistic market may have objectives other than profit maximisation.
(ii) Outline two objectives firms in oligopoly may have, other than achieving the maximum level of profits.

(25)

(i) Outline three key features of an oligopolistic market.

1. Few Sellers in the industry.
Because of this each seller can influence the price of the commodity and/or the output sold.

2. Interdependence between firms.
Firms in oligopoly do not act independently of each other. They will each take into the account the likely reactions of their competitors, hence prices tend to be rigid.

3. Product Differentiation occurs.
The commodities which firms sell are close substitutes. Firms will engage in advertising to persuade consumers to buy their product rather than a competitor’s product.

4. Barriers to entry.
These are common in an oligopolistic market as existing firms will wish to maintain their share of the market. Examples of barriers include: high costs of setting up in the industry, brand proliferation etc.

5. Collusion may occur.
Firms within the industry may meet to control the output in the industry and/or control prices e.g. OPEC.

6. Non-price competition is more common than price competition.
Due to the fear of how competitors will react, firms tend not to engage in price competition but rather they engage in non-price competition to gain consumers.

3 features x 5 marks each
(ii) Outline two objectives firms in oligopoly may have, other than achieving the maximum level of profits.

1. Prevent government market intervention/interference
   Firms may fear that the existence of supernormal profits would attract government intervention into the market and thereby restrict the firm’s activities.

2. Discourage the entry of new firms into the industry
   Firms may set prices at a low level which is intended to discourage the entry of new firms into the industry (limit pricing). By pursuing this policy they are forsaking higher present profits for potentially higher future profits.

3. Maximisation of sales / increased share of market
   Once a minimum level of profit is earned to reward shareholders, provide funds for reinvestment etc. the firm may concentrate on maximising sales; increasing its share of the market. It may wish to achieve economies of scale; decrease the level of sales of rival firms; become the most dominant firm in the market.

4. Maintain adequate profits.
   - The owners of the business may prefer to earn stable/moderate levels of profits rather than constantly striving for large supernormal profits as this is what they are satisfied with.
   - Where the managers are not owners they may tend towards a more conservative approach rather than a dynamic drive to profit maximisation.

2 x 5 marks each
(b) Using one clearly labelled diagram:

(i) Explain the shape of the ‘kinked’ demand curve facing a firm in oligopoly.
(ii) Explain the long run equilibrium position of this firm.  

Diagram: 9 marks

<table>
<thead>
<tr>
<th>Price axis</th>
<th>Quantity axis</th>
<th>Kinked D/C</th>
<th>Distinct MR curve</th>
<th>MC</th>
<th>AC</th>
<th>P₁</th>
<th>Q₁</th>
<th>Point G</th>
</tr>
</thead>
</table>

(i) **Shape of the demand curve: 8 marks**

**Demand curve - AB**
If this firm increases its price others will leave their prices unchanged so this firm will lose many customers – this portion of the D/C is elastic.

**Demand curve – BC**
If this firm lowers its price others will match this price decrease so this firm will gain few additional customers – this portion of the D/C is inelastic.

(ii) **The long run equilibrium position of this firm:** 8 marks

1. Equilibrium occurs at point G where (a) MC = MR & (b) MC is rising.
2. The firm will produce Q₁ and sell this output at price P₁.
3. The firm’s cost of production is shown at point G.
4. Should costs rise between points D and E then market price tends to remain constant at P₁.
5. This firm is earning SNPs because AR exceeds AC or barriers to entry exist.
(e) It is suggested that consumers prefer price competition in the market place, yet there are benefits for consumers arising from non-price competition.

(i) Explain two reasons why consumers may prefer price competition.

(ii) Describe two benefits to consumers of non-price competition. (25)

(i) Reasons why consumers may prefer price competition

1. Lower prices / value for money
Consumers will benefit from availability of commodities at lower prices. Consumers will be able to get better value for their limited income.

2. Higher disposable income
With lower prices consumers will now have a higher disposable income, resulting in a better standard of living.

3. More choice
As consumers have a greater disposable income they can now choose how to spend this additional income.

4. Preferable to non-price competitive measure because:
   - Consumers pay for non-price competitive measures e.g. advertising;
   - Offers may be unwanted / of little value; tokens may go unused etc.

(ii) Benefits of non-price competition.

1. Consumer loyalty rewarded
Consumers can, by shopping in selected stores, receive loyalty points which can be used as they wish.

2. Stability in prices
Non-price competition means prices will not be constantly changing and so consumers do not have to worry that they are losing out on bargains / may be better able to budget.

3. Better quality commodities / services
Firms may improve the quality of their commodities; offer better service and/ or after sales service to consumers.

4. Allows consumers to save and / or avail of ‘free’ gifts
With regular shopping consumers can ‘save’ their loyalty points for those time periods when they incur additional expenses e.g. Christmas; Easter etc. Consumers may benefit from ‘free’ gifts from retailers e.g. free turkeys at Christmas.

5. More informed consumers
Through advertising consumers may acquire more information about products and services and so can make more informed choices.

25 marks (7+6+6+6)
Oligopoly

Assumptions

- Few Sellers in the industry
- Interdependence between firms
- Product Differentiation occurs
- Barriers to entry
- Collusion may occur

Short & Long Run

Price Competition

Advantages
- Lower prices
- Higher disposable income
- More choice

Non Price Competition

Advantages
- Consumer loyalty rewarded
- Stability in prices
- Better quality goods

Demand Curve A to B
- this portion of the D/C is elastic

Demand Curve B to C
- this portion of the D/C is inelastic

SUPER NORMAL PROFIT
- is earned because AR > AC. Profits exists due to barriers to entry.

PRICE / OUTPUT
- The firm produces at Q1 and sells at P1

EQUILIBRIUM
- This occurs where MC = MR and MC is rising

COSTS OF PRODUCTION
- The market price remains constant as long as costs lies between D and E.

SCARCE RESOURCES
- The firm produces at the lowest point on the average cost curve

Collusion is any undertaking by separate and rival companies to restrict competition between them with the aim of increasing their total profits.

Types of collusion

1. Limit Pricing
2. Sales Territories
3. Implicit Collusion
Oligopoly

Assumptions

Short & Long Run

Price Competition
Advantages

Non Price Competition
Advantages

Demand Curve A to B

Demand Curve B to C

Super Normal Profit

Price / Output

Equilibrium

Costs of Production

Scarce Resources

Collusion is

Types of collusion

1.

2.

3.

4.

5.

6.
Imperfect Competition

Assumptions underlying Imperfect Competition

1. **There are many buyers in the industry.**
   An individual buyer, by his/her own actions, can’t influence the market price of the goods.

2. **There are many sellers in the industry.**
   An individual seller can influence the quantity sold by the price it charges for its output.

3. **Product differentiation exists.**
   The goods, supplied by the producer, are not homogenous but are close substitutes. Firms use branding to distinguish their products from one another.

4. **Freedom of entry and exit.**
   No barriers to entry exist within the industry. It is possible for firms to enter/leave the industry as they wish.

5. **Reasonable knowledge.**
   Within the industry each firm has reasonable knowledge of profits made by other firms. Consumers have a reasonable knowledge of the prices being charged for different products.

6. **Each firm attempts to maximise profits.**
   Firms produce where $MC = MR$. Each firm will attempt to minimise costs of production.

Advantages of Imperfect Competition to consumers

1) **Greater choice**
   Goods are not homogenous, but are close substitutes, therefore consumers have a greater choice of goods/services.

2) **Normal Profit**
   In the long-run consumers are not being exploited as the firm is earning normal profits.

3) **Lower prices**
   Competition between firms in the industry will help lower prices and make them more competitive for consumers.

4) **Innovative goods/services**
   Innovation is encouraged as firms will constantly strive to gain a competitive edge over their rivals, hence, consumers get the benefit of modern up-to-date goods/services.
Product Differentiation

The goods which are produced are close substitutes / similar goods / not identical goods.

Product differentiation can be achieved by:

1. **Branding**
   Establishing different and distinctive brand names for the products. 
   *Nike, Addidas, Reebok*

2. **Competitive Advertising**
   Creating differences in the products in the minds of consumers e.g. through packaging which clearly distinguishes one product from another
   *Daz v. Surf / Kellogs Cornflakes*

3. **Product innovation**
   Firms develop their product further (add value) so that it is better or more advanced than that of competitors.
   *Lyons pyramid tea bags /Avonmore – super milk / Fairy detergent – anti bacterial agents.*

Imperfect Competition is considered wasteful of economic resources for two reasons

1) **Inefficient Use of Resources**
   The firm at long run equilibrium is not producing where their average costs are at a minimum. The firm has **overcapacity** because equilibrium is not at the point of minimum cost.

2) **Competitive Advertising**
   In order to keep their market share all firms take part in competitive advertising. This only pushes up costs for the consumer who ends up paying a high price for the product.

However,

1. **Advertising creates employment** within the advertising industry and the firm itself through larger scales.
2. **Sponsorship**, another form of advertising, ensures the survival of many sporting and cultural events.
3. In Imperfectly Competitive Markets, **product innovation** is encouraged. Firms are always striving to introduce new or improved products to gain a competitive edge.
Imperfect Competition in the Long Run and Short Run

Explain with the aid of a diagram in each case the conditions for a profit maximising firm to be in equilibrium under imperfect competition:

(i) **In the short run**

- **Explanation of short run equilibrium:**
  - Equilibrium/ Profit maximisation occurs at point \( X \) where \( MC = MR \) (\( MC \) is rising and cuts \( MR \) from below).
  - The level of output produced is \( Q_1 \) and the price the firm sells this output at is \( P_1 \).
  - The average cost of production is shown at point \( C \) / not producing at lowest point of \( AC \).
  - This firm is earning super normal profits because \( AR > AC \).

(ii) **In the long run.**

- **Explanation of long run equilibrium:**
  - Equilibrium / profit maximisation occurs at point \( X \) where \( MC = MR \) (\( MC \) is rising and cuts \( MR \) from below).
  - The level of output produced is \( Q_2 \) and the price the firm sells this output at is \( P_2 \).
  - The average cost of production is shown at point \( C \).
  - This firm is earning normal profits because \( AR = AC \).
  - The firm is not producing at the lowest point of \( AC \) / this indicates that the firm is wasting scarce resources.

---

### Marking of Diagrams

<table>
<thead>
<tr>
<th>Short Run</th>
<th>Long Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>P &amp; Q</td>
<td></td>
</tr>
<tr>
<td>MR</td>
<td></td>
</tr>
<tr>
<td>( D = AR )</td>
<td>( AC = AR )</td>
</tr>
<tr>
<td>AC</td>
<td>Correct equilibrium:</td>
</tr>
<tr>
<td>MC</td>
<td>Lowest point of AC</td>
</tr>
<tr>
<td>Correct equilibrium</td>
<td></td>
</tr>
</tbody>
</table>

7 marks | 5 marks
How Imperfect Competition compares with Perfect Competition and Monopoly

**Perfect Competition**
1. Both earn SNPs in the short run but not in the long run
2. Equilibrium positions are not the same: PC => MC=MR=AR=AC
   IMP C => MC=MR and AC=AR

**Monopoly**
1. Both have downward sloping demand curves
2. Equilibrium positions are not the same: Imp C => MC=MR and AR=AC
   Monopoly=> MC = MR and AR>AC
   3. A monopolist earns SNPs in the long run but a firm in Imp Competition does not.

**Price Cutting** => Long run equilibrium was reached by the introduction of new firms which caused SNPs to fall. A price war between firms would also erode SNPs.

**Non-Price Competition**=> Firms do not compete on the basis of price but rather by changing packaging, design or quality. This is called Product Variation, e.g. bringing out a new improved product.
### Past Leaving Cert Questions

**2014 Section B – Question 2a – 25 Marks**

(i) State and explain three assumptions underlying the theory of imperfect competition.

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

(ii) Explain why a firm’s demand curve under imperfect competition differs from a firm’s demand curve under perfect competition.

<table>
<thead>
<tr>
<th>Demand Curve</th>
<th>Imperfect Competition</th>
<th>Perfect Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

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Page 53
Rónán Murdock
2013 Section B – Question 2b – 30 Marks

(i) Explain, with the aid of a diagram, the long run equilibrium of a firm in imperfect competition.

(ii) With reference to your diagram in (b) (i) explain why the firm is not making socially efficient use of scarce resources.
2013 Section B – Question 2 – 20 Marks
“A few large retailers (e.g. Tesco, SuperValu, Dunnes Stores, Aldi, Lidl) dominate the Irish grocery market at present.” Suggest a market structure which most closely reflects this situation. Explain your answer.
2013 Section B – Question 2c – 25 Marks
The global market for toothpaste products can be described as an imperfectly competitive market, where firms engage in competitive advertising and branding.

(i) Explain the term ‘competitive advertising’.

(ii) Outline, using an example, how advertising can be used to prevent small firms entering an industry.

(iii) State and explain two possible disadvantages of advertising for the consumer

(i) Competitive advertising
This is advertising which stresses the advantages of one firm’s products/services over its rivals. 7 marks

(ii) Existing firms may continue to spend money on advertising to increase their sales/market share persuading consumers that their product is the best, so consumers will stay with their products making it difficult for small firms to enter. 3m

Any correct Example: 3 marks
Two firms spend €6,000 on an advertising campaign.
The small firm produces output of 300 units so the average cost per unit is €20.
The larger firm produces output of 8,000 units so the average cost per unit is €0.75.

(iii)
1. Increased prices
The firm may have to increase prices to cover the increased costs.

2. False / Misleading information
Consumers may be presented with inaccurate/incomplete information leading to confusion / mis-information.

3. Impulse buying / creates unsustainable wants
The advertising may lead customers to impulse buy and so ‘waste’ part of their income. Advertising may create a desire in consumers for a life style which is not attainable.

4. Harmful commodities
Advertising may encourage the consumption of harmful commodities e.g. cigarettes; alcohol which may damage the health of the consumer.

5. Unnecessary pollution
Consumers may have to pay for the removal of litter caused by advertising such as leaflets discarded etc.

2 at 6 marks (3+3) each
2013 - Short Question 8 – 17 Marks
‘Imperfect Competition is wasteful of resources’. Do you agree with this statement? Yes /No
Explain your answer.

• Yes.
• It does not produce at the lowest point of average cost. This is due to spending by the
  firm on advertising its products / services.
• Also the firm does not produce a sufficient quantity to benefit from economies of scale.

(1+8+8) marks.

On the next page you are going to look at a question from 2009 on Imperfect
Competition. Before you do this take five minutes to read through the Chief
Examiners Report on that question.

Question 2. Imperfect Competition

Attempt Frequency: 87%
Average mark: 61%

This was the most popular question in Section B and produced the highest average
score.

(a) (i) The majority of candidates was able to achieve maximum marks for explaining
the assumptions underlying the theory of imperfect competition. Some reasons
identified for loss of marks included; lack of development of points made, referring to
buyers and sellers in the one point and stating incorrectly that ‘they can’t influence the
market’. Some candidates omitted any reference to MC=MR when explaining the profit
maximising assumption. The points made in sub-section (ii) lacked development in
many cases. Marks were lost through non-elaboration of the points made. Candidates
must note the specific command word/outcome verb given in the question e.g. ‘outline’
and answer the question accordingly.

(b) In general the two diagrams were drawn clearly and labeled correctly. Some
diagrams were very small and some candidates attempted to show the two situations on
one diagram. A significant number of candidates are not showing cost (C) on their
diagrams, thereby not referring to costs and inefficiencies in their explanations.
Candidates should be given time to practise drawing relevant diagrams and explaining
them in a comprehensive manner. Diagrams are an aid to the written responses and
marks are awarded for both.

(c) The majority of candidates agreed with the statement and made relevant points to
substantiate their answers. However, the better answers compared the major food
retailers to an ‘oligopoly’ market structure. Their reference to the degree of
interdependence, the relatively small number of large retailers and the significant non-
price competition within the retail food market, indicated a very good knowledge of
current economic events and an ability to relate events to economic theory. Restating
the assumptions of imperfect competition, without any reference to the food retail
market, did not result in marks being awarded.
2009 Section B – Question 2a – 30 Marks
(i) State and explain the assumptions underlying the theory of imperfect competition.
(ii) Outline the advantages imperfect competition may offer consumers. (30 marks)
2009 Section B – Question 2b – 30 Marks
Explain with the aid of a diagram in each case the conditions for a profit maximising firm to be in equilibrium under imperfect competition:
(i) in the short run; (ii) in the long run. (30 marks)

<table>
<thead>
<tr>
<th>Short Run</th>
<th>Long Run</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S:</strong> SNP’s are earned in the short run as AR &gt; AC. However in the long run as more firms enter the market, competition pushes down prices until AR = AC and only economic profits are earned.</td>
<td></td>
</tr>
<tr>
<td><strong>P:</strong> In the short-run, Q₁ units are sold at price P₁, in the long-run Q₂ units are sold at price P₂</td>
<td></td>
</tr>
<tr>
<td><strong>E:</strong> In the short-run, equilibrium occurs at point G₁, where MR = MC and MC is rising. In the long-run, equilibrium occurs at point G₂, where MR = MC and MC is rising.</td>
<td></td>
</tr>
<tr>
<td><strong>C:</strong> In the short-run, the cost of production is C₁ = AC at the equilibrium point (G₁). In the long-run, the cost of production is C₂ = AC at the equilibrium point (G₂).</td>
<td></td>
</tr>
<tr>
<td><strong>S:</strong> Imperfect competition is inefficient in the short-run and in the long-run, as production does not occur at the lowest point of the AC curve, thus wasting scarce resources.</td>
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</tr>
</tbody>
</table>
2009 Section B – Question 2c – 15 Marks
‘Major food retailers in the Irish market, such as Aldi, Dunnes, SuperValu and Tesco operate under conditions of Imperfect Competition’.
Do you agree with this statement? Give reasons for your answer, referring to major food retailers in the Irish market mentioned above.

<table>
<thead>
<tr>
<th>2007 Section B – Question 2 – 25 Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(c) (i) Many firms today engage in <strong>product differentiation</strong>. Explain this underlined term showing, with suitable examples, how it can be achieved.</td>
</tr>
<tr>
<td>(ii) Explain the effect of product differentiation on the AR and MR curves of a firm, which previously operated under conditions of perfect competition. (25 marks)</td>
</tr>
</tbody>
</table>

| (i) **Product differentiation**: Making a product / service different from others (competitors), to make it more attractive to a particular target market. I.e. the products are not the same. |
| (ii) As a result of product differentiation: |
| • A firm’s AR will be downward sloping from left to right. |
| As products are close substitutes: |
| If a firm lowers price it can expect to attract some but not all customers from other firms; if the firm increases prices it may expect to lose some but not all customers – so the firm will sell less at higher prices and more at lower prices. Consequently the demand curve (AR curve) facing the firm is downward sloping. |
| • If AR is falling then MR is also falling and lies below AR. To encourage more customers the firm must drop the price. The AR Curve is falling. The revenue from the increased sales will be reduced by the falling revenue on each unit previously sold at a higher price but now at a reduced price. |
2005 Section B – Question 2 – 75 Marks
(a) State and explain the assumptions underlying the theory of imperfect competition. (20 marks)

(b) (i) Explain, with the aid of a clearly labelled diagram the long run equilibrium position of a firm in imperfect competition.
(ii) State and explain ONE feature of this firm in long run equilibrium which would be common to a firm in long run equilibrium under perfect competition.
(iii) State and explain ONE feature of this firm in long run equilibrium which would be common to a firm in long run equilibrium under monopoly. (40 marks)
(c) Consider the retail market for petrol. Do you believe that this market operates under conditions of imperfect competition? State reasons for your answer. (15 marks)

2001 Section B – Question 1 – 75 Marks
(a) State and explain the assumptions underlying the theory of Imperfect Competition. (25 marks) *(list off 3 times without looking at notes)*

(b) Draw the demand curve which faces a firm in imperfect competition and justify its shape. (10 marks)
(c) Discuss, with the aid of a clearly labelled diagram, the implications of the assumptions in (a) above, on the equilibrium of the firm in the long run under conditions of imperfect competition. (30 marks)

(d) State ONE FEATURE of this firm in long run equilibrium which would be common to a firm in long run equilibrium under EITHER perfect competition OR monopoly. (10 marks)

| Perfect Competition 1. Both earn Normal Profits in the long run. |
| Monopoly 1. Both waste scarce resources, do not produce at lowest point of AC curve. |
| 2. Downward-sloping demand curve, both must decrease price to increase quantity demanded. |
| 3. Price exceeds marginal cost. |
75 Marks – 30 Minutes

1(a) State and explain the assumptions underlying the theory of Imperfect Competition. 25 marks

(b) Explain, with the aid of a diagram, the long run equilibrium of a firm operating under the conditions of Imperfect Competition. (25 Marks)

(c) Why is Imperfect Competition considered to be wasteful of resources? (25 Marks)
# Imperfect Competition

## Assumptions
- Many buyers in the industry
- Many sellers in the industry
- Product differentiation exists
- Freedom of entry and exit
- Reasonable knowledge

## Advantages of Imperfect Competition
1. Greater choice
2. Normal Profit
3. Lower prices
4. Innovative goods

## Short Run

## Long Run

<table>
<thead>
<tr>
<th>SUPER NORMAL PROFIT</th>
<th>SUPER NORMAL PROFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is earned because AR &gt; AC.</td>
<td>There is no SNPs earned, AR = AC</td>
</tr>
<tr>
<td>PRICE / OUTPUT</td>
<td>PRICE / OUTPUT</td>
</tr>
<tr>
<td>The firm produces at Q1 and sells at P1</td>
<td>The firm produces at Q1 and sells at P1</td>
</tr>
<tr>
<td>EQUILIBRIUM</td>
<td>EQUILIBRIUM</td>
</tr>
<tr>
<td>This occurs at point where MC = MR and MC is rising faster than MR</td>
<td>This occurs at point where MC = MR and MC is rising faster than MR</td>
</tr>
<tr>
<td>COSTS OF PRODUCTION</td>
<td>COSTS OF PRODUCTION</td>
</tr>
<tr>
<td>The cost of producing is shown at point B. The firm is not producing at the lowest point on the average cost curve.</td>
<td>The cost of producing is shown at point B. The firm is not producing at the lowest point on the average cost curve.</td>
</tr>
<tr>
<td>SCARCE RESOURCES</td>
<td>SCARCE RESOURCES</td>
</tr>
<tr>
<td>The company is not producing at the lowest point on the AC curve and the company is wasting scarce resources</td>
<td>The company is not producing at the lowest point on the AC curve and the company is wasting scarce resources</td>
</tr>
</tbody>
</table>

## Why does Imperfect Competition tend to be wasteful of scarce resources?
1. Competitive Advertising
2. Doesn’t produce at lowest point on a/c curve
3. Purposely holds back on production

## How can product differentiation be achieved?
1. Branding
2. Competitive advertising
3. Product Innovation
Imperfect Competition

Assumptions

Advantages of Imperfect Competition

1) 
2) 
3) 
4) 

Short Run

Long Run

<table>
<thead>
<tr>
<th>SUPER NORMAL PROFIT</th>
<th>SUPER NORMAL PROFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRICE / OUTPUT</td>
<td>PRICE / OUTPUT</td>
</tr>
<tr>
<td>EQUILIBRIUM</td>
<td>EQUILIBRIUM</td>
</tr>
<tr>
<td>COSTS OF PRODUCTION</td>
<td>COSTS OF PRODUCTION</td>
</tr>
<tr>
<td>SCARCE RESOURCES</td>
<td>SCARCE RESOURCES</td>
</tr>
</tbody>
</table>

Why does Imperfect Competition tend to be wasteful of scarce resources?

5. 
6. 
7. 

How can product differentiation be achieved?

4. 
5. 
6.
Perfect Competition

Assumptions underlying Perfect Competition

1. **There are many buyers in the industry.**
   An individual buyer, by his/her own actions, can’t influence the market price of the goods.

2. **There are many sellers in the industry.**
   An individual seller can influence the quantity sold by the price it charges for its output.

3. **The goods are homogenous**
   The goods which are supplied by the producers are exactly identical. Thus it is pointless for a firm to advertise.

4. **Freedom of entry and exit.**
   No barriers to entry exist within the industry. It is possible for firms to enter/leave the industry as they wish.

5. **Perfect knowledge of profits and prices**
   Within the industry each firm has very accurate knowledge of profits made by other firms. Consumers has very accurate knowledge of the prices being charged for different products.

6. **Each firm attempts to maximise profits.**
   Firms produce where MC = MR. Each firm will attempt to minimise costs of production.
(ii) Explain, with the aid of labelled diagram, the equilibrium position of a firm in short run perfect competition. (25 marks)

![Diagram of Perfect Competition Short Run Curve]

<table>
<thead>
<tr>
<th><strong>Diagram</strong></th>
<th><strong>Explanation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>MC curve</td>
<td>At point A: MC = MR</td>
</tr>
<tr>
<td>AC curve</td>
<td>The firm produces Q₁</td>
</tr>
<tr>
<td>D = AR = MR</td>
<td>Firm will sell this output at P₁</td>
</tr>
<tr>
<td>Point A</td>
<td>Firm will earn SNP’s because AR &gt; AC.</td>
</tr>
<tr>
<td>P₁</td>
<td></td>
</tr>
<tr>
<td>Q₁</td>
<td></td>
</tr>
<tr>
<td>Cost is at point B.</td>
<td></td>
</tr>
</tbody>
</table>
Perfect Competition Long Run Curve

(b) With the aid of a labelled diagram(s), explain the impact which the entry of new firms would have on the market and on the equilibrium position of this firm. (25 marks)

<table>
<thead>
<tr>
<th>Mkt. Diagram</th>
<th>Firm Diagram</th>
<th>Explanation Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>P axis</td>
<td>P axis</td>
<td>Market supply curve shifts out to the right.</td>
</tr>
<tr>
<td>Q axis</td>
<td>Q axis</td>
<td>Market price falls / the firm’s D/C falls</td>
</tr>
<tr>
<td>D</td>
<td>AC</td>
<td>Firm will now produce a smaller quantity.</td>
</tr>
<tr>
<td>S1</td>
<td>MC</td>
<td>Amount of SNP’s earned will fall / be eliminated.</td>
</tr>
<tr>
<td>S2</td>
<td>D = AR = MR</td>
<td></td>
</tr>
<tr>
<td>P1</td>
<td>P2</td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>Q2</td>
<td>Equilibrium point</td>
</tr>
</tbody>
</table>

25 marks graded.

Firms in Perfect Competition do not engage in advertising. Why?

1. **Homogenous goods**
   Because there is no difference between the goods there is no point in advertising.

2. **Increased costs with very little additional revenue**
   Costs from advertising would rise greater than revenue so there is no point advertising.

3. **Benefits the entire industry**
   Advertising by a single firm would not just benefit this firm but the entire industry.
2012 Section B – Question 2 – 75 Marks

a) (i) Explain the reason for the shape of the demand curve of an individual firm in perfect competition.
(ii) Outline two advantages of perfect competition. (20)

(b) (i) Explain, with the aid of a labelled diagram, the equilibrium position of a firm in short run perfect competition.
(ii) With the aid of labelled diagrams, explain the impact which the entry of new firms would have on the market and on the equilibrium position of the firm.
(c) Contrast the characteristics of perfect competition with monopoly under the following headings:

- Barriers to entry;
- Profits in the long run;
- Economies of scale;
- Price discrimination. (20)

2007 – Section B – 75 Marks
A (i) A firm operating under conditions of perfect competition is a ‘price taker’. Explain the concept of being a ‘price taker’.
(ii) Explain, with the aid of labelled diagram, the equilibrium position of a firm in short run perfect competition. (25 Marks)

(i) **Price-taker:** A firm that can alter its rate of production and sales without significantly affecting the market price of its product.

(ii) **Diagram:**

- S: SNP’s are earned as AR>AC at equilibrium point G.
- P: Q₁ units are sold at price P₁.
- E: Equilibrium point occurs at G, where MC=MR and MC is rising.
- C: Cost of production = C (i.e. AC at equilibrium point G)
- S: Scarce resources are used inefficiently as production does not occur at lowest point of AC curve.
(b) With the aid of a labelled diagram (s), explain the impact which the entry of new firms would have on the market and on the equilibrium position of this firm. (25 marks)

- Market supply curve shifts out to the right.
- Market price falls / the firm’s D/C falls
- Firm will now produce a smaller quantity.
- Amount of SNP’s earned will fall / be eliminated.

(c) (i) Many firms today engage in product differentiation. Explain this underlined term showing, with suitable examples, how it can be achieved.
(ii) Explain the effect of product differentiation on the AR and MR curves of a firm, which previously operated under conditions of perfect competition. (25 marks)

As a result of product differentiation:
- A firm’s AR will be downward sloping from left to right.
As products are close substitutes; if a firm lowers price it can expect to attract some but not all customers from other firms; if the firm increases prices it may expect to lose some but not all customers – so the firm will sell less at higher prices and more at lower prices. Consequently the demand curve (AR curve) facing the firm is downward sloping.

- If AR is falling then MR is also falling and lies below AR. To encourage more customers the firm must drop the price. The AR Curve is falling. The revenue from the increased sales will be reduced by the falling revenue on each unit previously sold at a higher price but now at a reduced price.
2010 Section B – Question 2C – 30 Marks
Using suitably labelled diagram(s), compare the long run equilibrium position of the monopoly firm with that of a perfectly competitive firm (assuming both operate under the same cost conditions) under the following headings

- Price and Output;
- Profits;
- Efficiency. (30 marks)

![Diagram](image)

**Diagram** → 10 items at 1 mark each + 3 items at 2 marks each = 16 marks.

<table>
<thead>
<tr>
<th><strong>COMMENT</strong></th>
<th><strong>MKS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price</strong></td>
<td>A firm in a monopoly position sells its output at a higher price – P&lt;sub&gt;m&lt;/sub&gt; rather than P&lt;sub&gt;c&lt;/sub&gt;. (P)</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>A firm in a monopoly position produces a smaller output than in perfect competition – Q&lt;sub&gt;m&lt;/sub&gt; rather than Q&lt;sub&gt;c&lt;/sub&gt;.</td>
</tr>
</tbody>
</table>
| **Profit**  | Because AR = AC (1) a firm in PC earns normal profit (1). (2) (S)  
|             | Because AR > AC (1) a firm in monopoly can earn SNPs. (1). (2) | 4 |
| **Efficiency** | A firm in PC produces at the lowest point of AC (1) and so is efficient (1). (2) (S)  
|                 | A monopoly may not produce at the lowest point of AC (1) and so maybe inefficient (1). (2) | 4 |

Usually Monopolies do not produce at the bottom of the AC curve and are therefore not usually efficient.
2010 Section B – Question 2C – 30 Marks
Using suitably labelled diagram(s), compare the long run equilibrium position of the monopoly firm with that of a perfectly competitive firm (assuming both operate under the same cost conditions) under the following headings

- Price and Output;
- Profits;
- Efficiency. (30 marks)

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<th>Price</th>
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<th>Output</th>
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<th>Profit</th>
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<th>Efficiency</th>
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</table>
2002 - Section B - Question 1 - 75 Marks

1. (a) Outline the assumptions underlying the theory of Perfect Competition. (20 marks)

(b) (i) Explain, with the aid of a labelled diagram, how a firm in Perfect Competition achieves equilibrium in the short run.
(ii) Derive and explain the short run supply curve of this firm. (20 marks)

(c) Discuss, with the aid of labelled diagrams, the impact which the entry of new firms would have on the short run equilibrium of existing firms, in perfectly competitive markets, earning supernormal profits. (20 marks)
75 Marks – 30 Minutes
1. (a) Outline the assumptions underlying the theory of Perfect Competition. 25 marks

(b) (i) Explain, with the aid of a labelled diagram, how a Perfectly Competitive firm can earn supernormal profit in the short run equilibrium position. (ii) In the long run, a Perfectly Competitive firm earns normal profit and produces at the minimum point on the average cost curve. Explain, with the aid of diagrams, the long run equilibrium position of the Perfectly Competitive firm. 30 marks
(c) Explain the main differences between Perfect Competition at long run equilibrium and Monopoly at long run equilibrium. (25 Marks)

### 2011 – Section A – Question 3 – 16 Marks
Name the market structure (Perfect Competition, Imperfect Competition or Monopoly) to which each statement below is most likely to apply:

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>MARKET STRUCTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) The firm has a perfectly elastic demand curve.</td>
<td>Perfect Competition</td>
</tr>
<tr>
<td>(ii) The product of the firm is unique.</td>
<td>Monopoly</td>
</tr>
<tr>
<td>(iii) Restaurants could be an example of this market structure.</td>
<td>Imperfect Competition</td>
</tr>
<tr>
<td>(iv) Average costs of the firm are at a minimum.</td>
<td>Perfect Competition</td>
</tr>
</tbody>
</table>

(16 marks)
**Perfect Competition**

**Assumptions**
- many buyers in the industry
- many sellers in the industry
- goods are homogenous
- Freedom of entry and exit
- Perfect knowledge of profits and prices
- Maximise Profits

**Short Run**

**Long Run**

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<tr>
<th>SUPER NORMAL PROFIT</th>
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<tr>
<td>Are earned because AR &gt; AC</td>
<td>Are not eliminated because of new entrants.</td>
</tr>
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<tr>
<th>PRICE / OUTPUT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>SCARCE RESOURCES</td>
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</tr>
<tr>
<td>The firm is not making efficient use of scarce resources</td>
<td>Firm is producing at lowest point on AC Curve</td>
</tr>
</tbody>
</table>

**Firms in Perfect Competition do not engage in advertising. WHY?**

1. Homogenous goods
2. Increased costs
3. Benefits the entire
Perfect Competition

Assumptions

Short Run

Long Run

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Firms in Perfect Competition do not engage in advertising.
WHY?
1.
2.
3.

WHAT HAPPENS TO THE MARKET SUPPLY CURVE IN THE LONG RUN?
Rónán Murdock
6th Year Economics Higher Level

Rónán is the Head Economics Teacher at The Dublin School of Grinds. He is also the author of the Leaving Certificate Revision textbook and is a popular teacher amongst students due to his ability to help them relate to the subject. Known for instilling confidence in students due to his deep understanding of the marking scheme, Rónán is a specialist at teaching Economics.