Leaving Certificate Economics Worksheet

Market Structures

Name		**Date**	

Instructions:

- Answer all questions in **Section A** and **Section C**.
- In **Section B**, answer **2** questions.
- In **Section D**, answer **1** question.
- Where asked, **use diagrams/graphs** with clear labels and a suitable scale.
- Support your answers using **realistic Irish examples** where appropriate.

Section A — Short questions (Answer all)

Answer briefly. (12 × 2 marks)

A1. Define **market structure**.

A2. Name the **four** market structures covered in the chapter.

Market Structure 1		**Market Structure 2**	
Market Structure 3		**Market Structure 4**	

A3. Define **market concentration**.

A4. State what **HHI** stands for and what it measures.

A5. State what **FFCR** stands for and what it measures.

A6. Give **two** characteristics of **perfect competition**.

Characteristic 1	
Characteristic 2	

A7. State the profit-maximising rule for a firm.

A8. What is meant by the **shutdown condition** in the short run?

A9. Give **two** characteristics of **imperfect competition**.

A10. What is meant by **strategic interdependence** in oligopoly?

A11. Define **collusion**.

A12. Give **one** source of monopoly power (from the chapter) and explain it in one sentence.

Section B – Calculations & interpretation (Answer 2 of 3)

Each question: 10 marks (Show workings where relevant. Use economic reasoning in interpretation.)

B1. Market concentration (HHI) — Dublin Airport car parking.

A competition authority is analysing a market with the following shares:

Provider	Firm A	Firm B	Firm C	Firm D
Market share (%)	68	22	5	5

(i) Calculate the **HHI** for this market.

(ii) Explain what your answer suggests about **market structure** (use the concentration idea from the chapter).

(iii) Suggest **two** likely outcomes for consumers in a highly concentrated market *if competition is weak.*

B2. Four-firm concentration ratio (FFCR) and classification.

A market has the following firm market shares (%): 30, 25, 15, 10, 8, 7, 5.

(i) Calculate the **FFCR**.

(ii) Using your result, explain whether the market is more likely to be **competitive** or **oligopolistic**.

(iii) Give **two** reasons why a high FFCR can create barriers for new firms.

B3. Competition authority decision (CCPC-style reasoning).

A large firm proposes to buy a rival. Analysts say the deal would leave the merged firm with **over 90%** of the market.

(i) Explain **two** economic reasons why a competition authority might block this takeover.

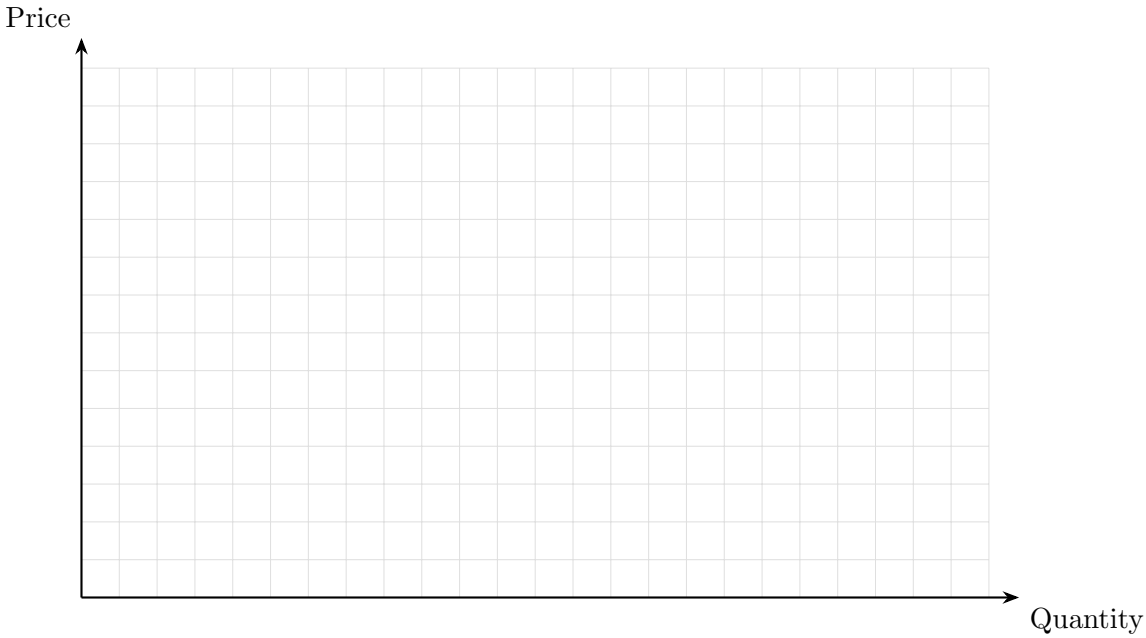
(ii) Give **one** counterargument a firm might make *in favour* of the merger, and explain why the authority might still be unconvinced.

Section C – Diagrams & applied analysis

C1. Perfect competition: short run vs long run

Use clearly labelled diagrams and correct economic terms (**AR, MR, MC, AC, AVC, SNP, entry/exit**).

C1.1 Draw and explain the short-run equilibrium of a perfectly competitive firm earning **super-normal profit**.



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C1.2 Draw and explain the short-run case where the firm makes a **loss** but **continues producing**. State the shutdown rule clearly.

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C1.3 Explain why **advertising is irrational** for firms in perfect competition.

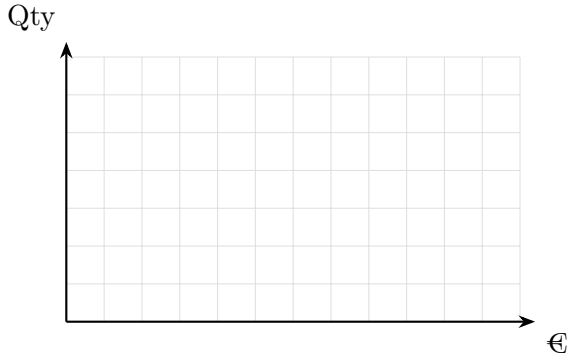
C2. Short-run supply curve of the competitive firm

C2.1 On the diagram below, sketch and label **MC** and **AVC**, and indicate the section of **MC** that forms the firm's **short-run supply curve**.

C2.2 Explain, in your own words, why the supply curve is not the whole MC curve.

C3. Imperfect competition: entry erodes supernormal profit

C3.1 Draw a firm diagram showing **short-run supernormal profit** under imperfect competition.



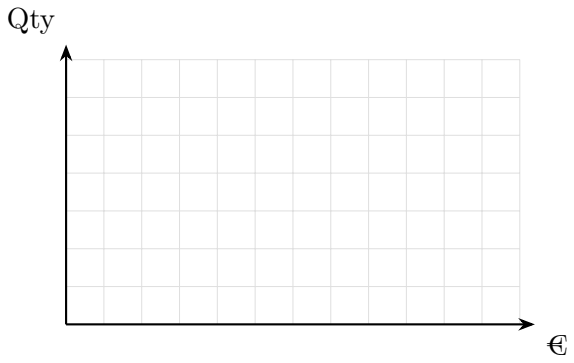
C3.2 Explain how entry in the long run changes a the ability of a firm in a perfectly competitive market to earn supernormal profit.

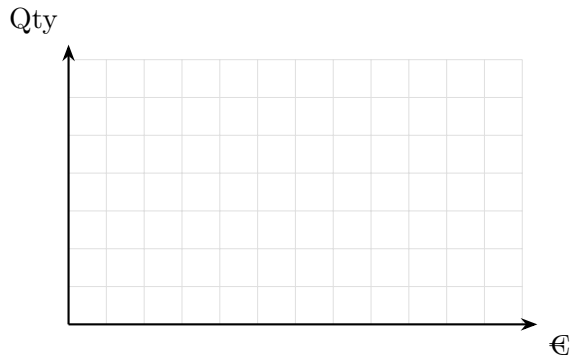
(a) In the first graph space, draw the short run position of the firm

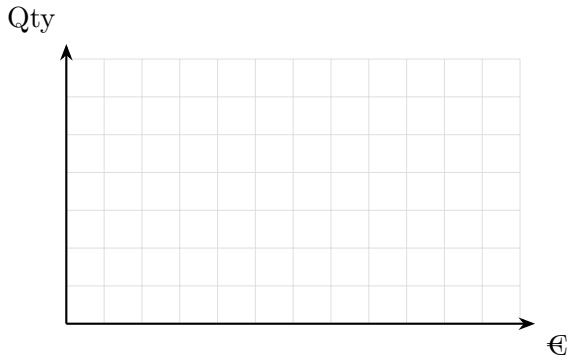
(b) In the second graph, show how new entrants influence the market price.

(c) In the third graph space, draw the long run position of the firm following changes in the market price

Then, in your own words, explain what is happening in each graph.

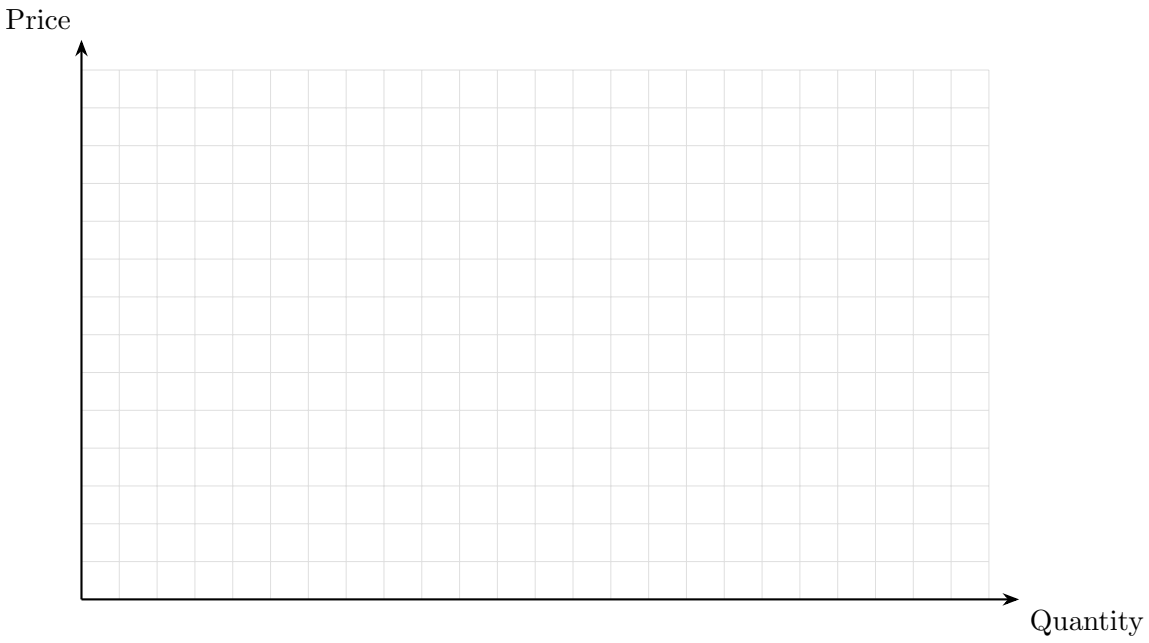






C4. Oligopoly: kinked demand and price rigidity

C4.1 On the grid below, draw the kinked demand curve model proposed by Paul Sweezy.



C4.2 Explain why demand is **elastic above** the kink and **inelastic below** the kink (Sweezy).

C4.3 Sweezy's theory has been heavily criticised every since it was proposed. State one criticism of the kinked demand model.

Section D – Evaluation & discussion)

Components of a top-marks response:

1. balanced argument,
2. accurate terms,
3. diagrams where helpful,
4. and a clear judgement.

D1. "Perfect competition is efficient, but it may be weak for innovation."

Discuss this statement using:

- **productive efficiency** and **allocative efficiency**,
- **two benefits** and **two challenges** of perfect competition,
- and at least **one** real-world example (eg, agriculture or commodity-type markets).

D2. Oligopoly strategies and consumer welfare.
Using the chapter concepts, explain how oligopolies can maintain market power through:

– barriers to entry

– and **collusion** (either explicit or tacit).

Then evaluate whether consumers are **always worse off** in oligopoly.

Extension – Critical thinking (Optional)

Patents and innovation. Patents create legal monopolies but may encourage innovation.

E1. Write a structured argument for why patenting can be positive for innovation and investment.

E2. Write one **balanced limitation** of patents from a consumer or competition perspective.

Teacher Marking Scheme (Quick, exam-like)

General marking approach:

- **Definitions (2 marks):** accurate + complete; key phrase(s) included.
- **Calculation questions:** method + correct working + interpretation in market-structure terms.
- **Diagram questions:** correct curves, correct labels (**AR/MR/MC/AC/AVC**), correct equilibrium output at $MC = MR$, price taken from **AR**, and correct shading/annotation for **SNP** or loss.
- **Discuss/evaluate (20 marks):** balance, depth, correct terms, developed examples, clear judgement.

Section A (indicative points)

Award full marks where students include:

- Market structure: organisation of an industry based on number of firms, entry barriers, product type, and pricing power.
- Concentration: extent to which market share is held by a small number of firms.
- HHI: sum of squared market shares; higher implies more concentration.
- FFCR: sum of top four shares; high suggests oligopoly.
- Perfect competition: homogeneous goods, free entry/exit, many small firms, perfect information, price takers.
- Shutdown rule: produce if $P \geq AVC$; shut down if $P < AVC$ in short run.
- Imperfect competition: product differentiation, many sellers, downward-sloping demand, free entry/exit, advertising common.
- Oligopoly: few firms, strategic interdependence, barriers to entry, potential collusion.
- Monopoly power: mergers, patents/copyright/trademarks, statutory monopoly, control of inputs, brand proliferation.

Section B (indicative solutions)

- B1 HHI: $68^2 + 22^2 + 5^2 + 5^2 = 4624 + 484 + 25 + 25 = 5158$ (accept arithmetic if shown and near-correct; some students may state 5518 if using rounded infographic variants; award method marks). Interpretation: highly concentrated; likely oligopoly/near-monopoly features; risks of higher prices, weaker quality, less choice.
- B2 FFCR: $30 + 25 + 15 + 10 = 80\%$; suggests strong oligopoly concentration. Barriers: economies of scale, brand loyalty, shelf-space crowding, limit pricing, high set-up/sunk costs.
- B3 Block merger: dominance reduces competitive pressure; likely higher prices, lower quality/service, less innovation; entry barriers strengthen. Counterargument: efficiencies/economies of scale; authority may reject if efficiencies not passed to consumers or if market power harm dominates.

Section C (diagram marking highlights)

- C1 Supernormal profit: horizontal AR=MR=P; output where MC meets AR; if $P > AC$ at that output, SNP rectangle shown. Loss but produce: $P < AC$ but $P \geq AVC$; shutdown rule explicitly

stated. Advertising: no differentiation; advertising raises costs without increasing demand at given price.

- C2 Supply curve: portion of MC above minimum AVC; below min AVC supply is zero.
- C3 Imperfect comp: downward AR; MR steeper; SR can have SNP; LR entry shifts AR left until tangent to AC at equilibrium (normal profit).
- C4 Kinked demand: elastic above kink (rivals don't follow price rises); inelastic below kink (rivals match price cuts); MR gap implies price rigidity; criticism: doesn't explain initial price / weak under large shocks.

Section D (20 marks)

High marks if students:

- Use $P = MC$ (allocative) and $P = \min AC$ (productive) accurately.
- Give two benefits and two challenges with developed explanation + example.
- For oligopoly: apply barriers + collusion + welfare evaluation (not one-sided); include judgement.

Extension (10 marks)

- Patents: reward innovation, allow recovery of R&D costs, encourage investment; limitation: higher prices, restricted access, slower diffusion, monopoly power.