

# Leaving Certificate Economics Worksheet

## Supply & Demand (Chapter 4)

Name		Date	
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### Instructions:

- Answer all questions in **Section A** and **Section C**.
- In **Section B**, answer **3** questions.
- In **Section D**, answer **1** question.
- Use precise graph language: **shift left/right** (not “moves up”), **price rises/falls**, **quantity rises/falls**, **equilibrium moves**.
- When explaining market adjustment: mention **cause** → **curve shift** → **shortage/surplus** → **price change** → **new equilibrium**.
- Key terms to know: **incentives**, **merit/demerit goods**, **rationality**, **opportunity cost**, **diminishing marginal utility**, **equi-marginal principle**, **demand function determinants**, **substitutes/complements**, **normal/inferior goods**, **exceptions (snob/speculative/addictive/Giffen)**, **supply determinants**, **costs**, **technology**, **taxation**, **objectives**, **price mechanism (signalling/rationing/transmission of preferences)**.

## Section A – Short questions

Answer briefly.

(20 × 2 marks)

**A1.** State **two** ways consumers influence what firms produce.


**A2.** State **one** way consumers influence prices in a market.


**A3.** Define a **positive incentive** and give one example.


**A4.** Define a **negative incentive** and give one example.


**A5.** Define a **merit good**.


**A6.** Define a **demerit good**.


**A7.** State **one reason** why incentives work better when substitutes exist.


**A8.** Define the assumption that consumers act **rationally**.


**A9.** Define **opportunity cost**.


**A10.** State the **law of diminishing marginal utility**.


**A11.** Write the **equi-marginal principle** condition using goods  $X$  and  $Y$ .


**A12.** Define **demand**.


**A13.** State the **law of demand**.


**A14.** Give two determinants of demand **other than the good's own price**.


**A15.** Define **complementary goods** and give one example.


**A16.** Define **substitute goods** and give one example.


**A17.** Define **supply**.


**A18.** State the **law of supply**.


**A19.** Define the **price mechanism**.


**A20.** Name the **three roles** of the price mechanism.


## Section B – Calculations &amp; applied questions (Answer 3 of 5)

**Each question:** 12 marks      (Workings + final answer + short explanation where asked.)

### B1. Equi-marginal principle (exam-style)

John allocates spending so that:

$$\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y} = \frac{MU_Z}{P_Z}.$$

He currently has:

$$\frac{MU_X}{P_X} = \frac{2400}{200}, \quad \frac{MU_Y}{P_Y} = \frac{1200}{100}, \quad \frac{MU_Z}{P_Z} = \frac{72}{P_Z}.$$

- (i) Calculate the common value of  $\frac{MU}{P}$  using  $X$  or  $Y$ .

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- (ii) Hence calculate  $P_Z$ .

- (iii) Explain in words why John would pay this price for  $Z$  (link to maximising satisfaction).

[illegible]

## B2. Diminishing marginal utility and rational choice

A student buys coffees per week. Their marginal utility schedule is:

Coffees per week	1	2	3	4	5	6
Marginal utility (utils)	30	22	16	11	7	3

Coffee price is €4.

- (i) Calculate  $\frac{MU}{P}$  for each coffee and identify when marginal benefit becomes low.

[illegible]

- (ii) Explain how this table illustrates the law of diminishing marginal utility.


- (iii) Give one real-world reason why consumers might *not* behave perfectly rationally even with this information.


### B3. Irish consumption data: growth rates

Using the table from the notes (current market prices, €m):

Food & non-alcoholic beverages: 9,826 (2019)  $\rightarrow$  14,289 (2024)

Education: 1,667 (2019)  $\rightarrow$  1,872 (2024)

- (i) Calculate the **percentage increase** in Food & non-alcoholic beverages from 2019 to 2024.

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- (ii) Calculate the **percentage increase** in Education from 2019 to 2024.

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- (iii) Suggest one reason why these two categories might grow at different rates (use: tastes, prices, income, demographics, policy).

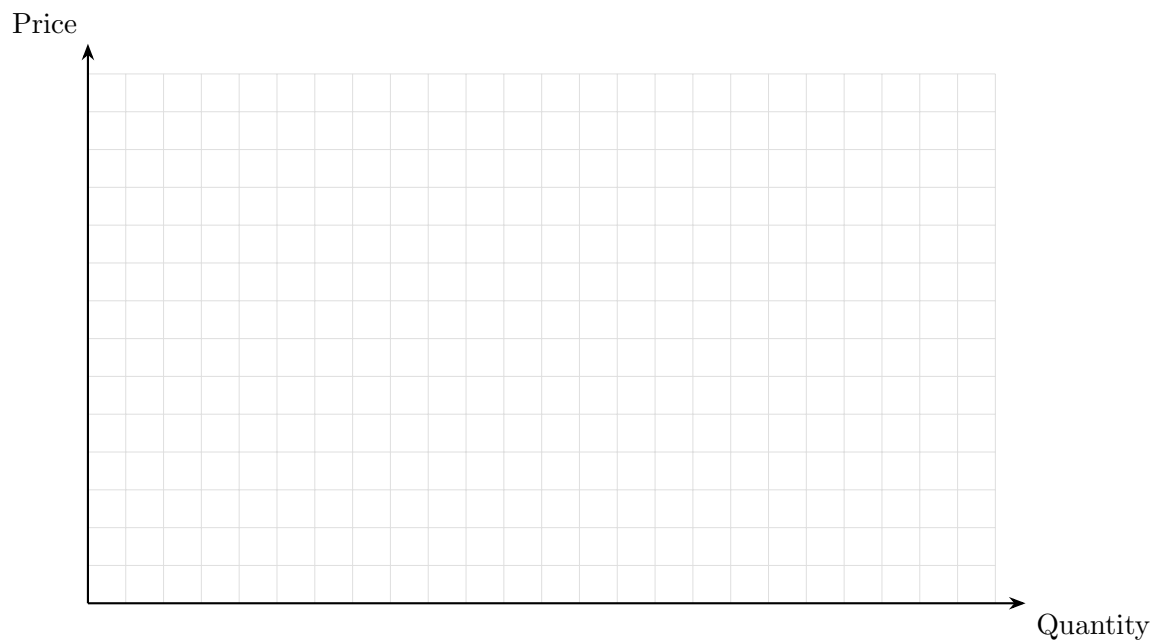



#### B4. Taxes, costs and supply: applying the supply function

A takeaway faces rising costs due to higher electricity bills and a new local licence fee.

- (i) Identify which determinants of supply are changing (use the supply function language).


- (ii) Draw a supply and demand diagram showing the likely impact on equilibrium price and quantity.



- (iii) Explain your diagram using precise language: curve shift direction, price change, quantity change, and new equilibrium.

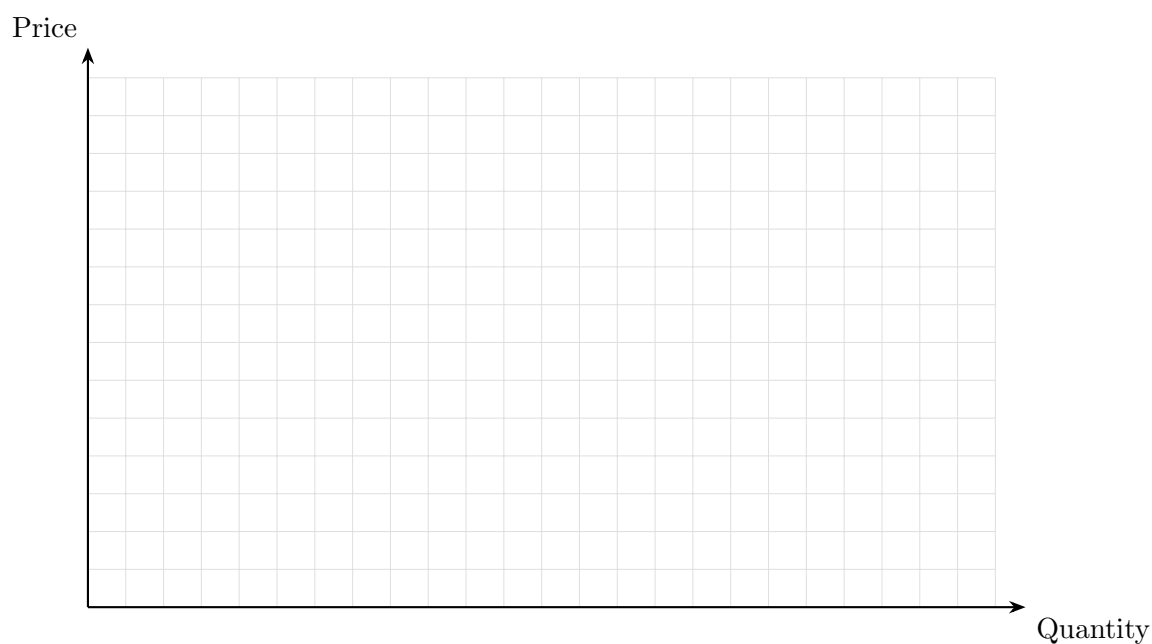

### B5. Normal vs inferior goods (income changes)

Households experience a fall in disposable income.

- (i) Define **normal** and **inferior** goods.


- (ii) Give one realistic example of each in an Irish context and explain how demand changes when income falls.


- (iii) On one set of axes, sketch and label two separate demand curve shifts: one for a normal good and one for an inferior good when income falls.

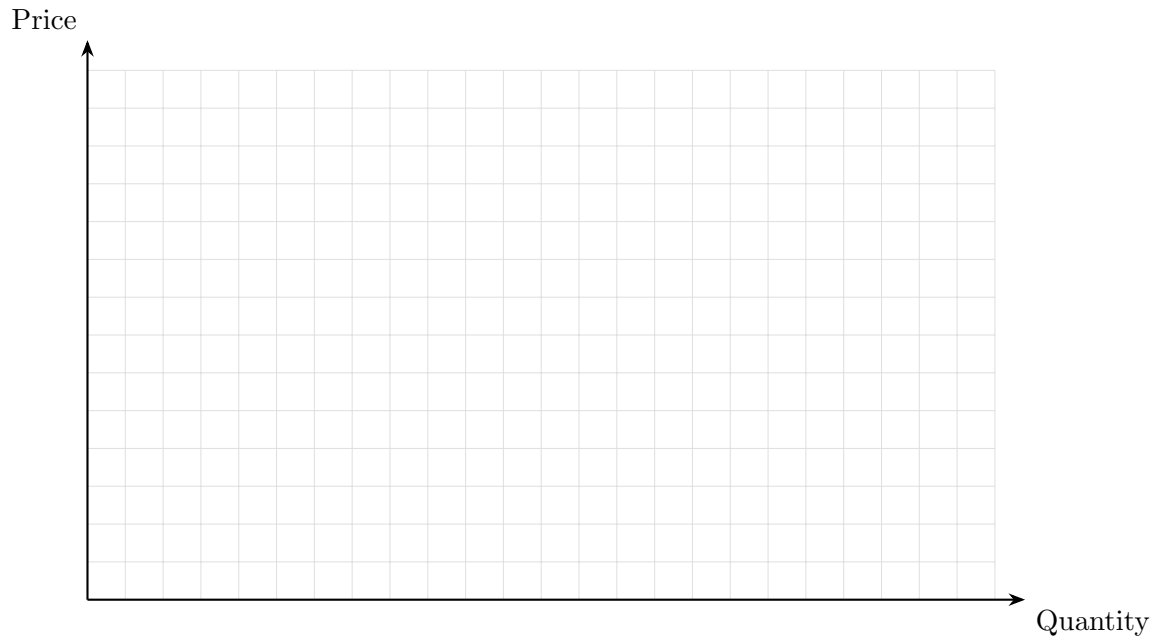


## Section C – Data, diagrams & market adjustment (Answer all)

### C1. Price mechanism with a demand increase (shortage)

Exam technique: when demand rises, you must mention (1) the **cause**, (2) **demand shifts right**, (3) **shortage at old price**, (4) **upward pressure on price**, (5) **new equilibrium**.

**C1.1** Draw a market diagram with  $S$  and  $D_0$  and label initial equilibrium as  $E_0$  with  $P_0$  and  $Q_0$ .



**C1.2** Suppose an unplanned factor (e.g. a hot spell) increases demand for ice-creams at all prices. Show the shift from  $D_0$  to  $D_1$  and label the new equilibrium  $E_1$ ,  $P_1$ ,  $Q_1$ .



**C1.3** At price  $P_0$ , clearly label  $Q_S$  and  $Q_D$  and shade the shortage area. Then explain why price rises and how the shortage is removed.


## C2. Supply decrease in the rental market (SEC-style)

A newspaper reports: “Landlords are leaving the Irish rental market in their thousands, blaming excessive taxation, rent control and constantly changing laws.”

You must show: **supply falls, supply shifts left, price rises, quantity falls, new equilibrium.**

**C2.1** On a supply and demand diagram for rented accommodation, show the impact of landlords leaving the market.



**C2.2** Write a full exam-style explanation (5 clear steps) using the correct directional words and curve-shift language.


### C3. Determinants of demand (classification + reasoning)

Use the demand function language from the notes: own price, substitutes, complements, income, expectations, tastes, unplanned factors, government regulation.

**C3.1** For each scenario, identify the determinant(s) of demand and state whether demand shifts left or right. Justify briefly.

- (i) A popular influencer promotes a new energy drink brand.
- (ii) The price of butter rises sharply.
- (iii) People expect concert ticket prices to rise further next month.
- (iv) A ban on underage vaping is enforced more strongly.
- (v) A new competitor cuts the price of a close substitute product.


#### C4. Exceptions to the law of demand (with examples)

The notes list: **snob goods**, **speculative goods**, **addictive goods**, **Giffen goods**. You must: define + link to the price-demand relationship.

**C4.1** For each type below, give (i) a short definition and (ii) one example.

**(i)** Snob good

**(ii)** Speculative good

**(iii)** Addictive good

**(iv)** Giffen good


## Section C – Irish consumption patterns (visual analysis)

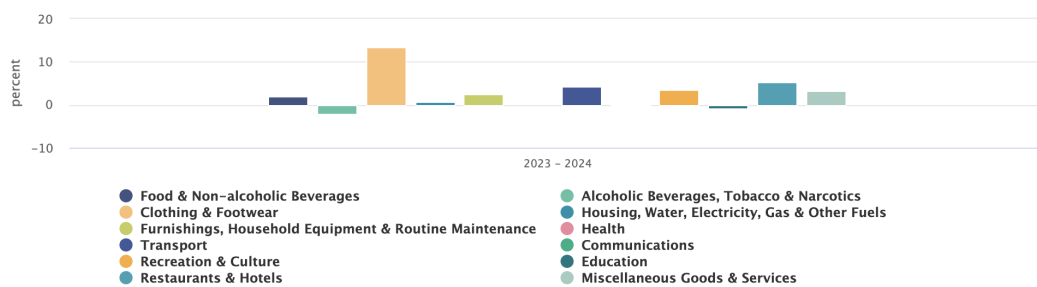
### C5. CSO-style charts: interpreting patterns

The notes include charts on:

- Contributions to Personal Consumption Expenditure (constant prices, 2024),
- Percentage change in consumption components (2023 to 2024),
- Personal Consumption vs Actual Individual Consumption over time.

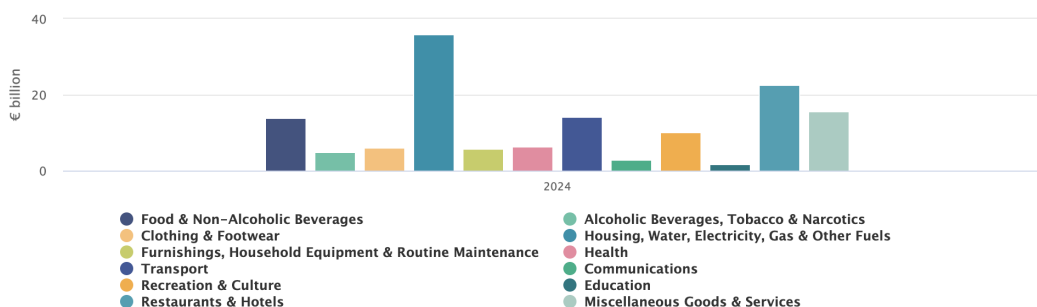
Your job: describe patterns and provide economic explanations (use demand determinants and incentives).

**Figure 10.2 Percentage Change in the Components of Personal Consumption Expenditure from 2023 to 2024**



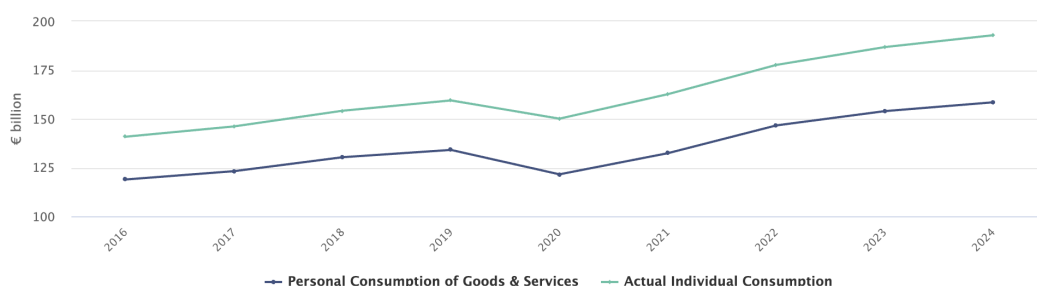
Source: CSO Ireland  
Highcharts.com

**Figure 10.1 Contributions to Personal Consumption Expenditure (constant prices), 2024**



Source: CSO Ireland  
Highcharts.com

**Figure 10.3 Personal Consumption Expenditure and Actual Individual Consumption, constant prices**



Source: CSO Ireland  
Highcharts.com

**C5.1** From the 2024 contribution chart, identify the **two largest** spending categories and suggest one reason each could be large for households.


**C5.2** From the percentage-change chart (2023–2024), identify:

- one category that increased strongly, and
- one category that changed very little or fell.

Explain one plausible economic reason for each (prices, tastes, income, regulation, substitutes/complements).


**C5.3** Using the line chart, describe the trend in consumption over time and suggest two reasons why household consumption could rise in some years and dip in others (use: income, expectations, unplanned factors, confidence).




## Section D – Evaluation & discussion

**HL style:** definitions + developed arguments + real-world examples + counterargument + judgement.

**D1. “The price mechanism leads to an efficient allocation of resources.” Discuss.**

In your answer:

- define the **price mechanism**,
- explain the **signalling**, **rationing** and **transmission of preferences** functions,
- use **two diagrams** (one shortage, one supply decrease) to support your explanation,
- include at least **one Irish example** (housing rents, energy bills, concert tickets, groceries),
- give two limitations (inequality, merit/demerit goods, imperfect info, addiction/speculation),
- finish with a clear judgement.


**D2. “Consumers do not always behave rationally.” Discuss.**

In your answer:

- state the assumptions of consumer behaviour (limited income, opportunity cost, diminishing marginal utility, equi-marginal),
- explain at least **four** reasons consumers may not behave rationally (information limits, bounded rationality, habit/brand loyalty, self-control, social pressure),
- connect to **incentives** (positive/negative) and whether incentives always work as intended,
- include examples (Buy-Now-Pay-Later, branded goods, nicotine, housing speculation),
- conclude with a balanced judgement: when does the rational model work well and when does it fail?


### D3. Evaluate how technology affects the marketplace.

In your answer:

- explain three technologies from the notes (e-commerce, booking platforms, price comparison),
- link each to changes in **demand** (information, tastes) and/or **supply** (costs, efficiency),
- discuss how technology can strengthen competition (and any downsides),
- use one example from everyday Irish life (e.g. supermarkets, hotels, fast food apps),
- end with a judgement: overall impact on consumers and firms.
