H2 Economics (9570)

Theme 2.1 — Exam Notes

Paper 2: Essay Techniques for Part (a) and Part (b)

Contents

Paper 2 Exam Structure

Key Facts

- **Duration:** 2 hours 30 minutes (150 minutes)
- **Total marks:** 75 marks (60% of H2 grade)
- **Structure:** 6 essay questions. Answer **3 total**. At least 1 from Section A (micro), at least 1 from Section B (macro), 1 free choice from either.
- **Per question:** Part (a) = 10 marks, Part (b) = 15 marks
- **Section A covers:** Themes 1 & 2 (microeconomics)
- **Theme 2.1 likely questions:** Price mechanism, D&S analysis, elasticities, government intervention

Timing Strategy per 25-Mark Essay

Stage	Target Time
Read + choose question	2 minutes
Plan both parts	3–4 minutes
Part (a) body	10–12 minutes
Part (b) body (FOR/AGAINST)	14–16 minutes
Conclusion (Part b)	2 minutes
Review / polish	2–3 minutes
Total per essay	**Approx. 30–35 minutes**

Exam Tip Pacing Rule

2 minutes per mark. A 10-mark question ≈ 20 minutes; a 15-mark question ≈ 25–30 minutes. If you are spending 35+ minutes on one essay, you will rush the others.

Assessment Objectives

AO	What it Tests
AO1	Knowledge & understanding of concepts, theories, principles
AO2	Interpretation of economic information (data, graphs, text)
AO3	Application & analysis — construct coherent arguments
AO4	Evaluation — make judgements, recognise assumptions, synthesise

Part (a) — 10 marks: Tests mainly **AO1 + AO3**. Focus: define, explain, analyse with diagrams. Brief evaluation (1–2 sentences) can lift you into the top band, but the emphasis is on clear explanation.

Part (b) — 15 marks: Tests **AO1 + AO2 + AO3 + AO4**. Focus: balanced arguments, integrated evaluation, clear judgement. AO4 (evaluation) is what separates the top band.

Command Words Reference

Part (a) Command Words

Word	What Examiners Expect
Explain	Give a clear account of causes/mechanisms. Use economic theory. Build a chain of reasoning (if X happens, then Y, then Z). Pair with a diagram.
Describe	Outline key features, trends, or characteristics. May involve reading data off a graph or table (Paper 1 style).
Distinguish	Identify and explain differences between two concepts. Must show BOTH what each is and how they differ.
Define	State the precise economic meaning. Usually worth 1–2 marks. Example: "Consumer surplus is the difference between the maximum price a consumer is willing to pay and the actual market price."
Analyse	Break down into component parts. Show how factors relate to each other. Use theory + diagrams.
With the help of a diagram	**MANDATORY:** Draw and reference a diagram. No diagram $\approx$ lost marks.

Part (b) Command Words

Word	What Examiners Expect
Discuss	Examine both sides (FOR and AGAINST). Then arrive at a balanced conclusion. One-sided = capped at 9/15.
Evaluate	Assess strengths and limitations. Make a judgement. "Evaluate" without a final verdict is just analysis.
To what extent	Similar to evaluate, but requires a SCALED conclusion. Not just "yes/no" but "to a large/small extent because ...".
Assess	Weigh importance or effectiveness. Consider multiple criteria and rank them.
Justify	Provide reasons and evidence for a claim. Must defend against potential counterarguments.
Critically examine	Analyse carefully + identify weaknesses, assumptions, limitations. Requires both explanation and evaluation.

Warning Command Word Traps

- **"Explain" with "with the help of a diagram":** You MUST draw the diagram and REFERENCE it in your answer. "As shown in the diagram..." or "The diagram illustrates that..."
- **"Discuss" without both sides:** You get capped at the middle band (9/15 maximum). ALWAYS present FOR and AGAINST.
- **"Evaluate" without judgement:** Description without verdict = capped. The conclusion **must** take a position, even if qualified.
- **"To what extent" without scaling:** "To a large extent" or "to a limited extent" + conditions. Never just "yes" or "no".

Part (a) Technique — DIEE Framework

The DIEE Framework

Command Word Part (a) 10 Marks

Step	What to Do
D | Define	Define the key term(s) in the question. Use precise syllabus-aligned wording. This establishes AO1 knowledge.
I | Illustrate	Draw a clearly labelled diagram. Axes (P, Q), curves (D, S), equilibrium (E), all relevant labels. Refer to it in text.
E | Explain	Explain the economic mechanism. Build a chain of reasoning: "Because X, therefore Y, and this leads to Z (ceteris paribus)." Use economic theory.
E | Evaluate	Brief evaluation (1–2 sentences). Note assumptions (ceteris paribus), limitations, or conditions. This is optional for top band but recommended.

Part (a) Mark Scheme

Band	Typical Characteristics
9–10 (Excellent)	Precise definitions. Diagram: accurate, fully labelled, referenced in text. Clear chain of reasoning. Brief but relevant evaluation.
6–8 (Good)	Good definitions. Diagram with minor omissions. Clear explanation. Limited or no evaluation.
3–5 (Adequate)	Vague definitions. Diagram present but poorly labelled or not referenced. Explanation is confused or incomplete.
0–2 (Weak)	Definition missing or wrong. No diagram/irrelevant diagram. Explanation is descriptive, not analytical.

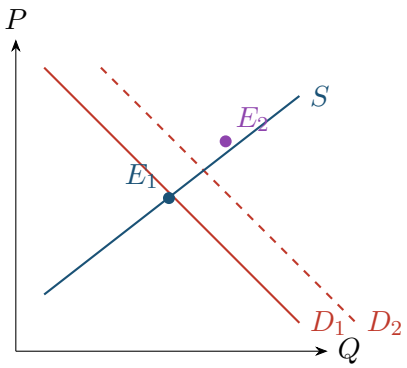
Worked Example 1: Demand Shift

Question: Explain how an increase in consumer income affects the market equilibrium for a normal good. Use a diagram. [10]

Model Answer:

D — Define: A normal good is one for which demand rises when income rises (YED > 0). Market equilibrium occurs where quantity demanded equals quantity supplied at a given price.

I — Illustrate:



E — Explain: An increase in consumer income raises demand for normal goods (e.g., restaurant meals). This is a **rightward shift** of the demand curve, from D_1 to D_2: at every price, consumers now demand more. At the original equilibrium price, there is excess demand (shortage). This shortage pushes the price upward. The rising price incentivises producers to increase quantity supplied (movement along S), while also causing consumers to reduce the quantity they demand (movement along D_2). A new equilibrium is reached at a higher price and higher quantity ($P\uparrow, Q\uparrow$). Consumer expenditure ($P \times Q$) may rise or fall depending on PED, but both P and Q have increased, so expenditure unambiguously rises.

E — Evaluate: This analysis holds ceteris paribus. In reality, multiple determinants may change simultaneously. Also, the size of the price and quantity changes depends on the elasticities of demand and supply: with inelastic supply (e.g., housing), the price rise will be larger than the quantity increase.

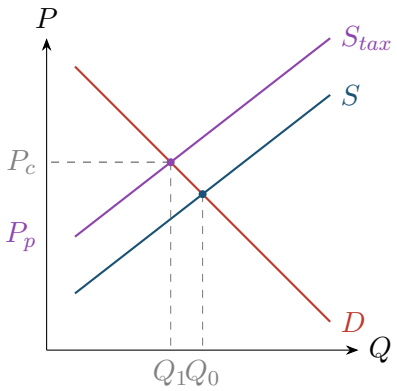
Worked Example 2: Government Intervention

Question: Explain how a per-unit tax on petrol affects the market equilibrium and welfare. Use a diagram. [10]

Model Answer:

D — Define: An indirect tax is a tax on expenditure imposed on producers, creating a wedge between the price consumers pay (P_c) and the price producers receive (P_p). Consumer surplus is the difference between willingness to pay and actual price paid.

I — Illustrate:



E — Explain: The tax shifts the supply curve leftward/upward from S to S_{tax} by the amount of the tax (\$t). The new equilibrium is where D intersects S_{tax}, at a higher consumer price P_c and lower quantity Q_1. Since petrol has inelastic demand (few substitutes, necessity for drivers), the price rises significantly while quantity falls only slightly. Most of the tax burden falls on consumers. Government revenue equals $t \times Q_1$ (the rectangle between P_c and P_p at Q_1). Consumer surplus decreases as consumers pay more for less petrol. Producer surplus also decreases as producers receive a lower net price. A deadweight loss (the triangle between Q_1 and Q_0 under the demand and supply curves) represents lost welfare from transactions that no longer occur.

E — Evaluate: The analysis assumes ceteris paribus and that the market is competitive. In the long run, petrol demand may become more elastic as electric vehicles become available, making the tax more effective at reducing consumption. Also, the carbon tax on petrol is Pigouvian: it corrects for the negative externality of emissions, so the DWL should be weighed against the reduction in external costs.

Part (b) Technique

FOR/AGAINST/JUDGEMENT Framework

Command Word Part (b) 15 Marks

Component	Structure
Introduction	Thesis statement + define key terms + roadmap of 3–4 arguments
FOR arguments	2 paragraphs supporting one position. Each uses PEEL structure.
AGAINST arguments	2 paragraphs supporting the opposite position. Each uses PEEL.
Judgement	Compare strength of arguments. State conditions. Deliver a clear verdict.
Conclusion	Brief summary + final judgement + broader implication

PEEL Paragraph Structure

Component	What to Write
P | Point	State one argument clearly in a single sentence.
E | Explanation	Explain the economic theory and mechanism. Build a chain of reasoning. Use economic vocabulary.
E | Example	Provide a real-world example. Singapore-specific examples score highly.
L | Link + Evaluate	Link back to the question. Evaluate: how strong is this argument? Under what conditions does it hold? What are its limitations?

The "Big Nine" Evaluation Strategies

#	Evaluation Strategy
1	**Short run vs Long run:** How do effects differ over time? PED, PES, and supply adjustment all vary with time horizon.
2	**Stakeholder impact:** Who gains? Who loses? Consumers, producers, government, taxpayers, foreign entities?
3	**Theory vs Reality:** Does the model assume perfect information, rationality, no transaction costs? Are these realistic?
4	**Intended vs Unintended consequences:** What side effects arise? Perverse incentives? Black markets?
5	**Assumptions / Limitations:** Ceteris paribus? Perfect competition? Homogeneous goods? Static analysis?
6	**Magnitude / Significance:** How large is the effect? Economically significant or trivial?
7	**Prioritisation / Trade-offs:** Efficiency vs equity? Short-run pain vs long-run gain?
8	**Singapore context:** Small open economy? Land and labour scarcity? High reliance on trade? Ageing population?
9	**Policy alternatives:** Could a different policy achieve the same goal more efficiently? Market-based vs command-and-control?

Exam Tip Using the Big Nine

Do NOT list all nine. Pick the **3–4 most relevant** to the question and weave them into your paragraphs naturally. For a tax question, use SR vs LR, stakeholder impact, theory vs reality, and policy alternatives. For a price ceiling question, use intended vs unintended consequences, stakeholder impact, magnitude, and Singapore context.

Part (b) Mark Scheme

Band	Characteristics
13–15 (Excellent)	Clear thesis. Balanced FOR/AGAINST with integrated evaluation. Multiple evaluation strategies used. Well-labelled diagrams referenced in text. Strong Singapore-specific examples. Explicit judgement.
9–12 (Good)	Clear structure. Both sides presented. Some evaluation, mostly at the end. Adequate diagrams and examples.
5–8 (Adequate)	One-sided or unbalanced. Limited or superficial evaluation. Weak examples or none. Diagram missing or not referenced.
0–4 (Weak)	Descriptive only. Confused or irrelevant arguments. No evaluation. No real-world context.

Theme 2.1 Essay Templates

Template A: D&S Analysis

Typical Part (a): *Explain how changes in non-price determinants affect market equilibrium. Use a diagram. [10]*

Typical Part (b): *Discuss the factors that affect the price elasticity of demand for a good and explain why knowledge of PED is important for a firm. [15]*

Part (a) Model Plan

D	Define: non-price determinants, market equilibrium, ceteris paribus
I	Diagram: D shift right (demand increase due to rising income for a normal good). Show old and new equilibria.
E	Chain of reasoning: income ↑ ⇒ D shifts right ⇒ shortage at original price ⇒ P ↑ ⇒ expansion along S + contraction along new D ⇒ new equilibrium at $P\uparrow, Q\uparrow$
E	Brief evaluation: depends on PED and PES. If both D&S shift, one effect is ambiguous.

Part (b) Model Plan

Introduction: Price elasticity of demand measures the responsiveness of Qd to changes in price. Its determinants and significance for firms are central to pricing and revenue decisions.

Argument	Content
FOR 1: Determinants — Substitutes	Availability of substitutes is the most important determinant. More substitutes ⇒ more elastic. Example: petrol (few substitutes) ⇒ inelastic ($\|PED\| \approx 0.3$); Starbucks coffee (many substitutes) ⇒ elastic ($\|PED\| \approx 2.0$). **Evaluate:** Substitutes matter most because consumers' ability to switch is the primary constraint on firms' pricing power.
FOR 2: Determinants — Necessity & Income share	Necessities (food, medicine) ⇒ inelastic. Luxuries (holidays) ⇒ elastic. Goods with small income share (salt) ⇒ inelastic. Time horizon: more elastic in LR (consumers adjust behaviour). **Evaluate:** These determinants interact — e.g., cigarettes are a harmful "luxury" that is inelastic due to addiction. The hierarchy of determinants matters.
FOR 3: Importance for firms — Revenue	PED determines TR effect of price changes. Inelastic: $P \uparrow \Rightarrow$ TR $\uparrow$. Elastic: $P \downarrow \Rightarrow$ TR $\uparrow$. Example: Grab surge pricing works because demand during peak hours is inelastic (consumers urgently need rides). **Evaluate:** Firms need accurate PED estimates. If managers misestimate PED, a price cut intended to boost revenue may backfire.
AGAINST: Limitations	PED varies along a linear demand curve — firms must know the relevant range. PED is not constant — it changes with market conditions (e.g., during COVID, demand for air travel became more elastic as consumers became more price-sensitive). Other factors (cost structure, competition, branding) also matter. **Evaluate:** PED is necessary but not sufficient for pricing decisions. Firms also consider XED (competitor reactions) and production costs.
Judgement	Knowledge of PED is **essential** for profit-maximising pricing decisions. It directly determines the relationship between price and revenue. However, it is one tool among several — firms must also consider production costs, competitor behaviour, and long-run strate-

Template B: Government Intervention

Typical Part (a): *With the help of a diagram, explain how a per-unit subsidy affects market outcomes. [10]*

Typical Part (b): *Evaluate the effectiveness of government intervention in correcting market outcomes, using Singapore examples. [15]*

Part (a) Model Plan

D	Define: subsidy, consumer/producer surplus
I	Diagram: S shifts rightward/downward by subsidy amount. Label new P_c (lower) and Q (higher), government cost rectangle.
E	Subsidy $\Rightarrow$ production cost $\downarrow \Rightarrow$ S shifts right $\Rightarrow$ at original price, surplus $\Rightarrow$ P falls to P_c, Q rises to $Q_{new} \Rightarrow$ CS $\uparrow$ (consumers pay less), PS $\uparrow$ (producers receive more including subsidy)
E	Government cost $= s \times Q_{new}$. DWL may arise if subsidy leads to overproduction (MC $>$ MB at Q_{new}).

Part (b) Model Plan

Introduction: Governments intervene to correct market failures and achieve equity. The effectiveness of intervention depends on the policy instrument chosen, market conditions (elasticities), and administrative capacity.

Argument	Content
FOR 1: Taxes — correcting externalities	Carbon tax ($25/t in Singapore) internalises external costs. Supply shift ⇒ higher price ⇒ reduced quantity. **Singapore example:** Carbon tax incentivises firms to invest in energy efficiency and cleaner technology. **Evaluate:** Effective when demand is elastic (large quantity reduction). For inelastic goods, tax mainly raises revenue rather than changing behaviour. Regressive effects must be addressed (e.g., U-Save rebates).
FOR 2: Subsidies — encouraging merit goods	HDB housing grants (up to $120k) make homeownership affordable. Subsidy shifts price down ⇒ encourages homeownership. **Singapore example:** Over 90% homeownership rate achieved. **Evaluate:** Effective for equity but expensive. Risk of overconsumption (people buying larger flats than needed). Must be targeted (means-tested) to avoid subsidising those who could afford market prices.
FOR 3: Quotas — direct quantity control	COE system directly controls vehicle population. Fixed quota ⇒ supply perfectly inelastic at quota ⇒ price adjusts. **Singapore example:** COE effectively limits car population growth (0% growth target from 2023). **Evaluate:** Quotas are more certain than price-based tools for achieving a quantity target. But they create quota rent (windfall gains for COE holders), high consumer prices, and reduced accessibility. ERP (congestion pricing) is a market-based alternative that controls *usage* rather than *ownership*.
AGAINST: Government failure	Intervention may create unintended consequences. Price controls cause shortages/-surpluses. Subsidies create fiscal burden. Regulations create compliance costs. Government may lack information, be captured by interest groups, or face political constraints. **Singapore example:** While Singapore generally avoids price controls, its heavy reliance on quotas (COE, foreign worker DRC) creates distortions (high prices, labour shortages) that market forces would resolve differently. **Evaluate:** Government failure must be weighed against market failure. The best policy minimises the sum of both.
Judgement	Government intervention can be effective when: 1) The intervention targets the specific market failure 2) The market has appropriate elasticities (e.g., tax elastic goods to change behaviour) 3) Adminis-

Template C: Elasticities and Policy

Typical Part (b): *Discuss how the price elasticities of demand and supply affect the impact of a tax on market outcomes. [15]*

Model Plan

Introduction: The impact of a tax — on price, quantity, revenue, and welfare — depends critically on the elasticities of demand and supply. Elasticity determines who bears the tax burden, the size of deadweight loss, and the effectiveness of the tax in changing behaviour.

Argument	Content
FOR 1: PED and tax burden	Inelastic demand ($\|PED\| < 1$): consumers cannot easily reduce Qd when price rises. Therefore, most of the tax is passed to consumers as a higher price (P_c rises significantly). Government revenue is high. DWL is small. **Example:** Cigarette tax. **Singapore context:** High taxes on tobacco (PED $\approx$ 0.4) generate significant revenue while only modestly reducing smoking rates — a trade-off between revenue and public health. **Evaluate:** Inelastic goods are effective for revenue generation but less effective for behavioural change.
FOR 2: PED and quantity reduction	Elastic demand ($\|PED\| > 1$): consumers can easily switch. The price rises only slightly (P_c barely changes) because producers cannot pass the tax without losing customers. Producers bear most of the tax. Quantity falls significantly. DWL is large. **Example:** Tax on luxury handbags. **Evaluate:** Elastic goods are effective for reducing consumption but raise less revenue. The large DWL must be weighed against the social benefit of reduced consumption (e.g., if the good has negative externalities).
FOR 3: PES and tax impact	Inelastic supply: producers cannot easily reduce Qs. They absorb most of the tax (P_p falls significantly). Elastic supply: producers can reduce output easily, so consumers bear more. **Example:** Tax on beachfront land (perfectly inelastic supply) $\Rightarrow$ price to consumers doesn't change; landowner absorbs all tax (pure windfall loss). **Evaluate:** When supply is perfectly inelastic, the tax does not affect quantity at all — only redistributes surplus from producers to government. This is efficient (no DWL) but may be inequitable.
AGAINST: Limitations of elasticity analysis	PED and PES are not static — they change over time. Long-run elasticities are larger than short-run. A tax that generates high revenue today may become less effective as consumers adjust (e.g., carbon tax: initially inelastic, but as EVs become viable, demand becomes more elastic). Elasticity estimates are uncertain. **Evaluate:** Policymakers must account for dynamic elasticity. A tax that is optimal today may need adjustment as market conditions change. This is why Singapore reviews the carbon tax trajectory (2024: \$25, 2030: \$50–80).
Judgement	Elasticity is the **primary determinant** of a tax's impact. The key policy insight is the **trade-off between revenue and be-**

Template D: Price Mechanism & Functions

Typical Part (b): *Discuss whether the price mechanism is always the most efficient way to allocate scarce resources. [15]*

Model Plan

Introduction: The price mechanism uses price signals to coordinate the decisions of consumers and producers, achieving allocative efficiency under ideal conditions. However, it has well-documented limitations.

Argument
FOR: Price mechanism is efficient

Singapore Examples Bank for Theme 2.1

Exam Tip Using Examples Effectively

For each essay, try to mention **at least two** Singapore-specific examples. A well-placed Singapore example (COE, carbon tax, HDB, ERP, Nutri-Grade, PWM, GST) immediately signals to examiners that you can apply theory to real economic policy.

Price Mechanism

Concept	Singapore Example
Signalling function	ERP rates signalling congestion levels; COE prices signalling scarcity of car ownership rights
Incentive function	ERP incentivising off-peak travel; Higher ABSD cooling measures disincentivising property speculation
Rationing function	COE auction rationing limited vehicle quota; Grab surge pricing rationing rides during peak
Mixed economy	Government directs 80%+ of land use (land sales programme) while most goods are market-priced

Demand and Supply

Concept	Singapore Example
Normal good	Cars (rising incomes $\rightarrow$ higher demand despite high COE)
Inferior good	Public transport (as income rises, some switch to cars); Instant noodles
Substitutes	MRT $\leftrightarrow$ Bus; Grab $\leftrightarrow$ Taxi; Hawker $\leftrightarrow$ Restaurant
Complements	Car $\leftrightarrow$ Petrol; Car $\leftrightarrow$ COE; Phone $\leftrightarrow$ Data plan
Tastes/preferences	Plant-based meat trend; Bubble tea boom (2018–2021); Fine dining post-COVID
Expectations	COE price expectations driving pre-emptive buying; Property cooling measure expectations
Population/demographics	Ageing population $\Rightarrow$ healthcare demand $\uparrow$; Immigration $\Rightarrow$ housing demand $\uparrow$
Supply: cost of production	Foreign worker levy increasing labour costs; Carbon tax increasing energy costs
Supply: technology	Automation in manufacturing (e.g., semiconductor fabs) increasing supply
Supply: external shocks	COVID supply chain disruptions; Russia-Ukraine energy price spikes

Elasticities

Concept	Singapore Example
Inelastic PED	Petrol ($\|PED\| \approx 0.3$), Cigarettes (≈ 0.4), Electricity (≈ 0.2), Rice
Elastic PED	Air travel ($\|PED\| \approx 2.5$), Fine dining, Branded clothing
PED & TR	COE: inelastic demand $\Rightarrow$ higher prices increase govt revenue
YED: Luxury	International travel, Fine dining, Luxury cars ($YED > 1$)
YED: Necessity	Public transport, Hawker food, Basic groceries ($0 < YED < 1$)
YED: Inferior	Instant noodles, Budget supermarkets ($YED < 0$)
XED: Substitutes	MRT $\leftrightarrow$ Bus (high positive); Public transport $\leftrightarrow$ Car (positive)
XED: Complements	Car $\leftrightarrow$ COE (strong negative); Car $\leftrightarrow$ Petrol (negative)
Inelastic PES	Housing (short-run), Land, Seats at National Stadium event
Elastic PES	Manufactured goods, F&B (with spare capacity), Garments

Government Intervention

Tool	Singapore Implementation
Tax (revenue)	GST 9% (2024); Corporate income tax 17%
Tax (corrective)	Carbon tax \$25/t (2024), \$50–80/t by 2030; Sin taxes on tobacco/alcohol
Subsidy (housing)	HDB BTO grants (up to \$80k); Enhanced CPF Housing Grant (up to \$120k)
Subsidy (healthcare)	Means-tested subsidies at public hospitals; CHAS subsidies for GP visits
Subsidy (education)	MOE subsidies for tertiary education (80%+ for local universities)
Price ceiling (housing)	HDB BTO prices are effectively subsidised — below market for comparable units
Price floor (wages)	Progressive Wage Model (cleaning, security, landscape, retail, lift maintenance)
Quota (vehicles)	COE Vehicle Quota System (0% growth target from 2023)
Quota (labour)	Foreign Worker DRC (Dependency Ratio Ceiling) per sector
Price mechanism solution	ERP (congestion pricing) — market-based alternative to quotas
Information intervention	Nutri-Grade labelling (changing preferences, not prices)

Common Errors to Avoid

ERROR 1: Movement vs Shift

Warning Highest-Risk Error

- **WRONG:** "The price increased, so demand decreased." → Incorrect. Price change causes **movement along** the demand curve (change in Qd), not a shift.
- **RIGHT:** "The price increased, causing a contraction of quantity demanded along the demand curve. The decrease in demand is a shift of the entire curve caused by non-price factors such as falling income."
- **Memorise:** Price changes → movement along the curve. Non-price factors → shift of the curve.

ERROR 2: Omitting Ceteris Paribus

When stating the law of demand/supply, always include "ceteris paribus" or "holding all other factors constant." This shows you understand the model's assumptions.

ERROR 3: PED = Slope

A linear demand curve has constant slope but varying PED. PED is $\frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$. The $\frac{P}{Q}$ ratio changes along the curve. Only the first term $\frac{\Delta Q}{\Delta P}$ is related to slope, and even then it's the inverse.

ERROR 4: Elasticity Formula Reversed

PED = %ΔQd / %ΔP, **not** %ΔP / %ΔQd. Mnemonic: "Quantity over Price" (alphabetically Q comes before P).

ERROR 5: No Diagram or Poor Diagram

- Always draw diagrams for questions that say "use a diagram"
- Axes must be labelled (P, Q, not just lines)
- Curves labelled (D, S, D_1, S_1, S_{tax}, etc.)
- Equilibrium labelled (E, E_1, E_2)
- Shifts indicated with arrows
- Refer to the diagram in your text: "As shown in the diagram..."

ERROR 6: Describing, Not Evaluating

For Part (b), listing "pros and cons" is not enough. You must:

- Weigh the arguments (which is stronger? under what conditions?)
- Judge (final conclusion must take a position)
- Use evaluation language: "however, this depends on...", "this argument is strongest when...", "on balance..."

ERROR 7: Fence-Sitting Conclusion

"Both sides have merit, so it depends" is not a conclusion. It is an abdication of judgement. You must state which side is stronger and why. A qualified conclusion is fine: *"To a large extent, markets allocate efficiently, but **where externalities exist**, government intervention is necessary. On balance, the price mechanism is the most efficient allocator for private goods."*

ERROR 8: No Real-World Examples

Theory without application is capped at middle band. Every argument should have at least one specific real-world example. Singapore examples score highest because they show local application.

ERROR 9: Confusing Scarcity with Shortage

Scarcity = permanent (limited resources). Shortage = temporary market condition at a given price ($Qd > Qs$). They are NOT the same.

ERROR 10: Forgetting the Supply Side

Many students only analyse demand when the question involves supply shifts. Always ask: does this affect D, S, or both? If both, analyse the net effect.

Quick Reference Tables

Elasticities Summary

Type	Formula	Positive Value	Negative Value
PED	$\frac{\%\Delta Qd}{\%\Delta P}$	N/A	N/A (always negative)
YED	$\frac{\%\Delta Qd}{\%\Delta Y}$	Normal good	Inferior good
XED	$\frac{\%\Delta Qd_X}{\%\Delta P_Y}$	Substitutes	Complements
PES	$\frac{\%\Delta Qs}{\%\Delta P}$	Upward-sloping S	N/A (always positive)

PED and Total Revenue

Demand Type	Price ↑ ⇒ TR	Price ↓ ⇒ TR
Elastic ($\|PED\| > 1$)	TR ↓	TR ↑
Inelastic ($\|PED\| < 1$)	TR ↑	TR ↓
Unit elastic ($\|PED\| = 1$)	TR unchanged	TR unchanged

Government Intervention Quick Reference

Intervention	Price Effect	Quantity Effect
Tax (per unit \$t)	P rises by less than \$t	Q falls
Subsidy (per unit \$s)	P falls by less than \$s	Q rises
Price Ceiling ($P_{max} < P_e$)	Artificially low	Shortage ($Qd > Qs$)
Price Floor ($P_{min} > P_e$)	Artificially high	Surplus ($Qs > Qd$)
Quota (quantity limit)	P rises	Q falls to quota level

Diagram Checklist (Must Be Able to Draw)

1. Basic D&S equilibrium (axes, curves, equilibrium, CS, PS)
2. Demand shift (left and right, with arrows, new equilibrium)
3. Supply shift (left and right, with arrows, new equilibrium)
4. Both D&S shifting simultaneously (label both old and new)
5. Tax (S shifts up, label P_c, P_p, tax wedge, DWL triangle, revenue rectangle)
6. Subsidy (S shifts down, label P_c, P_p, subsidy, government cost)
7. Price ceiling (P_{max}, shortage bracket)
8. Price floor (P_{min}, surplus bracket)
9. Quota (vertical supply at quota, label quota price)

Exam Tip Final Exam Day Checklist

- **Pen & ruler** (draw straight lines on diagrams)
- **Calculator** (check batteries)
- **Read ALL 6 questions** before choosing — pick your 3 strongest
- **Plan** both parts before writing (3–4 mins)
- **Diagram first** for Part (a), then explain around it
- **Integrate evaluation** throughout Part (b), not just in a separate paragraph
- **One clear judgement** in conclusion — no fence-sitting
- **At least 2 Singapore examples** per essay
- **Watch the clock:** 30–35 min per essay