H2 Economics (9570)

Theme 2.1 & 2.2 — Exam Pattern Notes

Exam Technique, Question Patterns, Command Words, Model Answers

---

Paper Structure and Timing

Paper	Essay Paper (Paper 2)
Duration	2h 30min
Total marks	75 (60% of total)
Questions	6 essay questions: 3 in Section A (micro), 3 in Section B (macro)
Answer count	Answer 3 questions total: at least 1 from Section A, 1 from Section B, 1 from either
Per question	25 marks each: Part (a) = 10 marks, Part (b) = 15 marks

Timing guide:

- 2h30min for 3 essays = 50 minutes per question
- Part (a) 10 marks: ≈ 20 minutes
- Part (b) 15 marks: ≈ 30 minutes
- Leave 5 minutes per answer for quick review

Command Words and What They Require

Command Word	What to do
Explain	State the concept, provide mechanism, show step-by-step cause-and-effect. Use theory and diagrams.
Discuss	Present multiple perspectives, argue for and against, reach a judgement.
Assess / Evaluate	Weigh strengths and weaknesses, consider SR vs LR, stakeholder impact, intended vs unintended consequences.
Compare	Identify similarities and differences systematically.
Distinguish	Focus on differences only.
Analyse	Break down into components, examine cause-and-effect, apply theory.
To what extent	Evaluate, consider magnitude, reach a qualified conclusion.

Mark allocation in Part (a) [10 marks]:

- AO1 + AO3: Demonstrate knowledge + apply theory analytically using diagrams
- Typically: 2 marks for diagram, 4 marks per analytical point (2 points = 8 marks, total 10)
- HCI rubric: R1 (analytical point 1) and R2 (analytical point 2), each with 4 criteria

Mark allocation in Part (b) [15 marks]:

- AO1 + AO2 + AO3 + AO4: knowledge, interpretation, analysis, and evaluation
- Analysis: ≈ 8-9 marks (build arguments)
- Evaluation: ≈ 6-7 marks (judgement, limitations, synthesis)

Exam Pattern Bank — Theme 2.1

Pattern 1: Effects of D/S Shifts with Elasticity

Element	Description
Trigger	"Explain the impact of [supply shock / demand change] on price and quantity"
Question type	Part (a) 10-mark analytical
Typical wording	"Explain the different impacts on prices of vegetables due to bad weather and falls in consumer incomes" (TYS 2023 Q2(a), HCI Tut 2.1 Q2)

Model answer structure (10 marks):

1. **R1: Supply shock (5 marks)**
   - Identify factor: bad weather → negative supply shock → S shifts left
   - Shortage at original P → upward pressure on P → price adjustment
   - State PED assumption: demand for vegetables is price inelastic (necessity, few substitutes) → justify
   - Conclusion: large price rise, small Q fall
   - Diagram: demand curve steep (inelastic), S shifts left, large P increase
2. **R2: Demand shock (5 marks)**
   - Identify factor: fall in income → demand falls (normal good, YED > 0) → D shifts left
   - Surplus at original P → downward pressure on P → price adjustment
   - State YED assumption: vegetables are necessities, $0 <$ YED < 1 → justify
   - Conclusion: small price fall, small Q fall (income inelastic demand)
   - Diagram: D shifts left slightly, small P decrease

Common traps:

- **Mixing up D and S shifts** — bad weather affects SUPPLY, not demand. Fall in income affects DEMAND.
- **No elasticity justification** — must explain WHY the D/S curve has that shape (justify PED/YED values)
- **No price adjustment process** — explain the shortage/surplus → price pressure → adjustment mechanism

Pattern 2: PED, TR, and Multiple Stakeholders

Element	Description
Trigger	"Assess the effects of a price change on the revenue of [firm] and [related firms]"
Question type	Part (b) 15-mark evaluative
Example	TYS 2016 Q1(b): "Assess the likely effects of a rise in price of one brand of jeans on the revenue earned by both retailers of that brand of jeans and those who sell other related goods" (HCI Tut 2.2 Q2)

Model answer structure (15 marks):

1. **R1: Effect on own-firm revenue (6 marks)**
   - Identify PED: depends on brand type. $500 jeans = few substitutes \rightarrow$ PED < 1. $20 jeans = many substitutes \rightarrow$ PED > 1.
   - PED < 1: Price rise → less than proportional fall in Qd → TR rises

- PED > 1: Price rise → more than proportional fall in Qd → TR falls
- Diagram: D-S diagram showing change in TR rectangle

2. **Ev1: Extent of TR change (3 marks)**
   - Depends on: (1) extent of price rise, (2) exact PED value
   - Luxury designer jeans may have PED > 1 if they constitute large proportion of income
3. **R2: Effect on related firms (6 marks)**
   - **Substitutes** (other jeans, trousers): Demand rises → D right → P and Q rise → TR rises for substitute retailers
   - **Complements** (tops, accessories): Demand falls → D left → P and Q fall → TR falls for complement retailers
   - Diagram: D-S for each related market
4. **Ev2: Evaluation (3 marks)**
   - Extent depends on XED (closeness of relationship)
   - SR vs LR: more elastic in LR as consumers find alternatives
   - Market structure: competitive markets = more elastic demand

Pattern 3: Government Intervention Effects

Element	Description
Trigger	"Discuss the effectiveness of [tax/subsidy/price control/quotas] in achieving [objective]"
Question type	Part (b) 15-mark evaluative

Model answer structure (15 marks):

1. **Define intervention and objective** (2 marks)
2. **Explain mechanism** — how the policy works (D/S diagram) (4 marks)
   - Tax: S shifts left, P rises, Q falls
   - Subsidy: S shifts right, P falls, Q rises
   - Price ceiling: below equilibrium → shortage
   - Price floor: above equilibrium → surplus
   - Quota: vertical supply at Q-quota
3. **Analyse welfare effects** — CS, PS, government revenue/cost, DWL (4 marks)
4. **Evaluate effectiveness** (5 marks)
   - Depends on PED/PES: inelastic demand → tax more effective in raising revenue, less effective at reducing Q
   - SR vs LR: longer time horizon → more elastic → larger Q effect
   - Unintended consequences: black markets (price controls), cheating (cartels/quota evasion)
   - Administrative costs, political feasibility
   - Alternative policies: could market-based approach (tradable permits) work better?

Pattern 4: Price Elasticity Applications

Element	Description
Trigger	"Using the concept of elasticity, explain..." / "How would PED/PES affect..."
Question type	Part (a) 10-mark or part of case study

Key PED/PES applications tested:

- **Tax burden:** Inelastic D → most of tax passed to consumers. Inelastic S → producers bear more of tax.
- **Pricing strategies:** Inelastic D → raise price. Elastic D → lower price.
- **Government revenue:** Tax on goods with inelastic D (petrol, alcohol, tobacco) raises more revenue.
- **Subsidy effectiveness:** Elastic D → larger Q increase from subsidy. Inelastic D → larger P reduction.

Exam Pattern Bank — Theme 2.2

Pattern 5: Firm Objectives and Strategies

Element	Description
Trigger	"Explain how firms pursue [objective] and evaluate the impact on..."
Question type	Part (b) 15-mark evaluative

Model answer structure (15 marks):

1. **Identify firm's objective** (2 marks)
   - Profit max: MR = MC (MC rising)
   - Revenue max: MR = 0
   - Satisficing: acceptable profit level + other goals
   - Market share: growth even at expense of profit
2. **Explain how objective shapes strategy** (5 marks)
   - Profit max → restrict output, charge higher price (if market power)
   - Revenue max → produce more, charge lower price than profit max
   - Market share → aggressive pricing, heavy marketing, capacity expansion
3. **Evaluate impact on efficiency and consumer welfare** (8 marks)
   - **Allocative efficiency:** Profit max may underproduce (DWL). Revenue max → more output → closer to allocative efficiency.
   - **Productive efficiency:** Market share growth enables economies of scale. But satisficing may tolerate X-inefficiency.
   - **Dynamic efficiency:** Supernormal profit funds R&D. Market share strategies in tech (e.g., Grab) sacrifice short-run profits for long-run innovation and network effects.
   - **Consumer welfare:** Price discrimination harms some consumers but benefits others. Collusion harms all consumers. Price competition benefits consumers.

Pattern 6: Economies of Scale

Element	Description
Trigger	"Explain how economies of scale affect [firm/industry]" / "Why do large firms have lower average costs?"
Question type	Part (a) 10-mark or part of case study

Model answer structure (10 marks):

1. Define economies of scale: falling LRAC as output increases in LR (2 marks)
2. Distinguish internal vs external (2 marks)
3. Explain 3-4 types of internal economies (4 marks):
   - Technical (specialised machinery, law of increased dimensions)
   - Managerial (specialisation)
   - Financial (lower borrowing costs)
   - Purchasing (bulk discounts)
4. Explain diseconomies that eventually set in (2 marks)
   - Coordination problems, bureaucracy, alienation

Pattern 7: Price Discrimination

Element	Description
Trigger	"Discuss whether price discrimination is beneficial to consumers"
Question type	Part (b) 15-mark evaluative

Model answer structure (15 marks):

1. Define third-degree price discrimination (2 marks)
2. Explain conditions required (2 marks)
3. Explain how it works (4 marks):
   - Segment market by PED
   - Higher price for inelastic segment, lower for elastic
   - Firm captures more CS → higher profit
4. Evaluate impact on consumers (7 marks):
   - **Against consumers:** Some groups (inelastic demand) pay higher price than under uniform pricing → lose CS
   - **For consumers:** Other groups (elastic demand, students, seniors) pay lower price — might not have been served at all under uniform pricing → gain CS
   - **Efficiency:** May increase output overall (compared to monopoly with uniform pricing) → may reduce DWL
   - **Equity:** Question of fairness — is it fair for students to pay less than adults?
   - **Singapore examples:** EZ-Link concession fares, Changi Airport parking

Pattern 8: Collusion vs Competition

Element	Description
Trigger	"Discuss whether collusion benefits or harms consumers" / "Evaluate the effectiveness of anti-collusion laws"
Question type	Part (b) 15-mark evaluative

Model answer structure (15 marks):

1. Define collusion (overt vs tacit) (2 marks)
2. Explain why firms collude (3 marks):
   - Higher joint profit, price stability, reduced uncertainty
   - Like a monopoly outcome, but shared
3. Explain cartel instability (3 marks):
   - Each firm has incentive to cheat (increase output secretly)
   - Prisoners' dilemma: cheating is dominant strategy
   - Breakdown factors: many firms, different costs, secret price cuts, demand fluctuations
4. Evaluate impact on consumers and society (7 marks):
   - **Harms:** Higher prices, lower output, DWL, reduced CS, less innovation
   - **Could benefit:** Collusion profit may fund R&D (dynamic efficiency), avoid destructive price wars
   - **Policy:** Competition Act (Singapore), CCCS enforcement, fines for bid-rigging
   - **Evaluation:** Effectiveness depends on detection capability, penalty severity, international coordination

The DIEE Framework for Essays

HCI's recommended essay structure for Economics (consistent with the Decision-Making Approach):

1. **D — Define key terms and state direction of essay**
   - Define the economic concepts the question asks about
   - State your thesis/focus: "This essay will analyse..."
   - For 10m part (a): state the two ways [R1 and R2] the factors cause different impacts
2. **I — Identify factors and theory**
   - Identify the relevant economic theory / concept
   - Identify the stakeholders involved
   - State the ceteris paribus assumption
3. **E — Explain with diagrams**
   - Draw well-labelled D-S diagrams (at least one per 15m essay)
   - Explain the mechanism: cause → adjustment process → outcome
   - Use elasticity concepts to explain extent
   - For 10m: exactly as per HCI rubric's 4 criteria
4. **E — Evaluate (for part b)**

- Extent (magnitude depends on PED/PES/YED/XED values)
- SR vs LR (longer time horizon changes elasticities)
- Stakeholder perspective (consumers vs producers vs government vs society)
- Intended vs unintended consequences
- Alternative policies or strategies
- Singapore context (policy examples, institutional constraints)

Diagram Checklist

For every diagram:

- Axes labelled: Price (P) on vertical, Quantity (Q) on horizontal
- Curves correctly sloped: D downward, S upward
- Equilibrium labelled: E, Pe, Qe
- Initial and new equilibrium clearly identified: E1, E2 or similar
- Direction of shift shown with arrows on the curves
- Shifts clearly labelled: D→D1 or S→S1
- Elasticity shown through curve steepness (justify shape in text)
- Equilibrium price and quantity changes: arrows showing direction
- For welfare: CS shaded, PS shaded, DWL triangle, tax/subsidy rectangle

Timing Guide

Task	Minutes
Read and select 3 questions	5
Per question: Plan outline	5
Per question: Write Part (a) 10 marks	15
Per question: Write Part (b) 15 marks	25
Per question: Quick review	5
Total per question	50

Common Errors to Avoid

1. **Mixing up movement vs shift:** A price change of the good itself always means movement ALONG the curve. Non-price determinants shift the curve.
2. **Neglecting elasticity justification:** Stating "PED $<$ 1" without justifying WHY (necessity, lack of substitutes) loses marks.
3. **No price adjustment process:** Explain shortage/surplus → price pressure → adjustment. Don't jump from "S shifts" to "P rises" without the mechanism.
4. **One diagram fits all:** Different scenarios need separate diagrams. A supply shock diagram and a demand shock diagram are different.
5. **Confusing SR shut-down and LR exit:** Shut-down = P $<$ AVC in SR. Exit = below normal profit in LR.

6. **Omitting evaluation in Part (b):** Part (b) is worth 15 marks and AO4 evaluation is 40% of the paper. Always include at least 3 evaluative points.

7. **Drawing unnecessary market structure diagrams:** Syllabus explicitly says diagrammatic comparison of market structures is not required. Use descriptive analysis instead.

8. **Forgetting Singapore context:** Singapore examples (COE, carbon tax, CCCS, NTUC, MRT fares) are expected for higher-band evaluation.