# **H2 Economics – Summary**

# **Answering Techniques**

#### **Data questions**

- Trend reading: 1) direction 2) magnitude
- Do not quote any data

#### **Explanation questions**

- Identify cause-and-effect relationships
- Draw graph wherever necessary

#### **Graphs**

Use graphs to effectively illustrate economic concepts

- titled
- well-labelled
- suitably sized (1/3 of page)
- effectively referenced in the accompanying textual explanation

#### **Essay**

1. Read the question, identify cause-and-effect relationships

Part (a): "Explain" → identify cause and effect relationship

Part (b): "Discuss" → Thesis, Antithesis, Evaluation

#### Action words

Phrasing	Requirement
Discuss policy A	How it works + limitations Evaluation: when is it recommended (FRESH)
Discuss whether policy A or policy B is better	How each works + limitation Evaluation: which policy is better (FRESH)
Discuss if policy A is the best (most effective /)	2 policies: how each works + limitation (i.e. propose another policy)

#### Terms in questions

Topic	Term	Analysis	
DD/SS	'affect equilibrium price and quantity'	Direction of change of P&Q	
	'affect the market'	Explain changes in P&Q, TE/TR	
	'sharp increase/decrease'	Explain 1) direction 2) magnitude of change (use elasticity)	
firms	'strategy of firm'	Cost / revenue strategies to increase profit	
	'affect level of profits'	Profits increase or decrease	
	'consequences on firms'	Effect on profit and survival	
	'different firms'	Firms differ in terms of: - nature / types of goods they produce - size	
	'survival of firms'	SR survival / shutdown conditions LR survival / shutdown conditions Others e.g. strategies to respond, characteristics of firm/ mkt	
	'reduce firms' vulnerability to closure'	Strategies turn the situation of subnormal profit around to normal/ supernormal profits	
policy	'interest of the society'	Govt's goals of E&E, csr welfare / utility	
	'effectiveness of policy'	Whether objectives can be achieved	
	'appropriateness of policy'	Use FRESH as criteria to measure appropriateness	
	'fiscal policy'	Market-based solution e.g. tax/subsidy (not C&C, i.e. laws)	
macro	'impact on the economy'	Anchor on 4 macro goals	

### 2. Read the preamble, pick out and apply relevant information

# 3. 2 requirements

- economic analysis (needs to have scope, depth, context)
- framework
- graph

# For part (b) policy questions:

R1: policy 1 + limitation (+ point evaluation, optional)

R2: policy 2 + limitation (+ point evaluation, optional)

# 4. Evaluation

CSQ (8m)	One evaluate point explained PLUS a recommendation is made		
CSQ (10m)	Two evaluative points explained or one point that is well developed PLUS a recommendation is made		
Essay	Two explained evaluative judgement PLUS a summative conclusion		

Evaluation criteria: PRISM STORM

**FRESH** 

Contextualise if needed

#### Structure:

Signpost	To summarise / to evaluate / to conclude / on balance  Types of stand  • Absolute  • Conditional - based on certain criteria		
Stand			
Substantiation	FRESH PRISM STORM?  Evaluation criteria  1. Market conditions e.g. consumer income, tastes and preferences, availability of substitutes, number of competitors, government policies, factor market, technological changes, market structure  - where relevant, to also consider the broader macroeconomic environment which the consumers and firms are operating in  2. Nature of product and product characteristics e.g. PED/PES  3. Magnitude and duration (degree of severity)  4. Initial starting point e.g. inherent advantages of a firm  5. Prevailing economic conditions  6. Countervailing forces / policies  7. FRESCH considerations (for strategies and policies)  - feasibility  - root cause  - gffectiveness  - gide effects / unintended consequences  - gertainty of outcome  - time horizon: short-term vs long-term  8. Ceteris paribus condition does not hold (DD/SS - bring in other factors)  For FIRMS & Decisions  (Apply to the given market / firm)		

- 1. Product **c**haracteristics nature of the product (Is the good an agricultural product or manufactured good? Does it involve simple production technology or a R&D-intensive product?)
- 2. Market **c**haracteristics availability of information, market contestability / intensity of market competition
- 3. Market **c**onditions influences on consumer demand, possible effect on and response from other firms, influences on cost, technological changes, extent and type of government intervention in the market
- 4. **C**ountervailing measures
  - what can the firms do to address the adverse effects?
  - govt laws to restrict firms' strategies

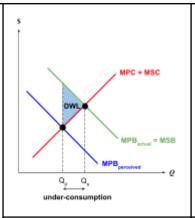
#### Mark allocation:

Stance/Judgement [1m]
Evaluation Point 1 [1m], Justification [1m]
Evaluation Point 2 [1m], Justification [1m]

# Content

Framework	Graph	Explanation chunk		
Scarcity	Good B	<ul> <li>PPC</li> <li>Scarcity: points on/inside PPC are attainable, points beyond PPC are unattainable</li> <li>Choice: choose among alternative combinations</li> <li>Opportunity cost: negative slope (increase production of one good → sacrifice production of other good)</li> <li>Productive efficiency: any point on PPC</li> <li>Allocative efficiency: ONE point on PPC that maximises social welfare</li> <li>Actual growth: inside PPC → on PPC</li> <li>Potential growth: outward shift of PPC</li> </ul>		
DD-SS	P <sub>1</sub> P <sub>2</sub> Shortage D <sub>1</sub> D <sub>2</sub> D <sub>3</sub>	<ul> <li>Market adjustment process: (shortage)</li> <li>1. At original price P<sub>0</sub>, Qdd &gt; Qss → shortage of Q<sub>0</sub>Q<sub>2</sub></li> <li>2. Buyers compete for the good, bid up price, price increase</li> <li>3. With fixed income, csr purchasing power decrease → Qdd ↓</li> <li>4. Units of o/p that can only be produced at higher marginal cost become profitable → prs incentivised to ↑ Qss to capture marginal profits</li> <li>5. Upward pressure on price until shortage is eliminated</li> </ul>		
Firm	MC MC MR AR = DD Q	Profit-maximisation: Profit-maximising output: MR = MC and MC is rising  1. Quantity: If o/p less than Q <sub>0</sub> , MR>MC, firm increase o/p to capture marginal profit, to Q <sub>0</sub> where MR=MC If o/p greater than Q <sub>0</sub> , MC>MR, firm decrease o/p to avoid marginal loss, to Q <sub>0</sub> where MR=MC At o/p Q <sub>0</sub> , MR=MC, any possible positive marginal profit has been exhausted  2. Price: Firm charges highest possible price P <sub>0</sub> given the demand		

Firm	Po MC MC MC AR = DD Q	<ol> <li>Firm adjustment process: (MC decrease)</li> <li>Profit-maximising output is at Q<sub>0</sub> where MR = MC and MC is rising</li> <li>Firm charges price P<sub>0</sub>, highest possible price given the demand to maximise profit</li> <li>When MC decreases, at original output Q<sub>0</sub>, MR &gt; MC. Firm increases o/p to capture marginal profit, until Q<sub>1</sub> where MR = MC</li> </ol>
Market failure		<ol> <li>Public good: e.g. street lighting</li> <li>Non-rivalrous: consumption by one person does not diminish qty for another person to consume         Cost of supplying the good to an additional consumer is zero → MC=0         To be allocatively efficient where P=MC, producers will have to charge zero → no rational producer will want to provide good</li> <li>Non-excludable: not possible / economically feasible to exclude someone from using the good even if he does not pay for it         Free-rider problem: non-payers can enjoy benefits of good paid by payers         No incentive for people to pay themselves and reveal their demand → no price signal → firms unable to charge a price for the good → unprofitable for firms to supply the good</li> </ol>
	MSC = MPC  MSC = MPC  MSB  MPB  under-consumption	<ol> <li>Externality: (positive externality)</li> <li>Define MPB, MPC in the given context</li> <li>Individuals only consider MPB and MPC → consume at private eqm output Qp where MPB = MPC</li> <li>Positive externality generates MEB: third parties enjoy spill-over benefits → additional benefit to society exceeds additional benefit to consumers/producers alone → MSB &gt; MPB</li> <li>Socially optimal output at Qs where MSB = MSC</li> <li>Qp &lt; Qs → under-consumption</li> <li>Output levels between Qp and Qs not consumed where MSB &gt; MSC → loss of additional benefit to society exceeds additional cost avoided → deadweight loss</li> </ol>



#### Imperfect information (consumer ignorance): (merit good)

- 1. Define MPB & MPC
- 2. Consumers not aware of full extent of benefits → underestimate benefits → perceived MPB < actual MPB
- 3. Shaped by imperfect information, consumers consume up to <u>private eqm level Qp</u> where perceived MPB = MPC
- 4. Socially optimal level Qp where MSB = MSC
- $5. \ \underline{\textbf{Under-consumption}} \rightarrow \text{DWL}$

#### Imperfect information (adverse selection):

(second hand car market: seller > buyer)

- 1. Seller has <u>more information</u> about quality of used cars than buyer  $\rightarrow$  seller <u>hide</u> some info from buyer
- 2. Buyer has less information on quality of good  $\rightarrow$  run risk of being sold low quality good  $\rightarrow$  offer lower price
- 3. Sellers of **plums** unwilling to offer good for sale  $\rightarrow$  leave market  $\rightarrow$  only **lemons** offered for sale
- 4. Market adversely selects against plums in favour of lemons
- 5. More and more sellers of plums leave market → market increasingly dominated by lemons → extreme situation where market for plums disappears → <u>potentially Pareto improving exchanges</u> do not take place → potential net benefit to society from having some good quality goods exchanged is lost → society welfare not maximised ⇒ allocative inefficiency

(insurance market: buyer > seller)

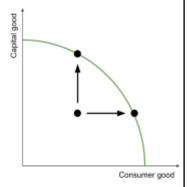
- 1. Buyer has <u>more information</u> about his health condition than seller + seller unable to adequately monitor buyer's behaviour
- 2. Individuals with poor health more likely to want insurance → proportion of individuals with poor health in pool of insured people increases
- 3. Claims from customers rise  $\rightarrow$  rise in cost  $\rightarrow$  charge <u>higher premium</u> to protect profit
- 4. Marginal cost of purchasing insurance increases, only consumers who expect to reap sufficiently high marginal benefits will purchase insurance (poor health)  $\rightarrow$  healthier individuals

	with low risks choose not to be insured  5. Market adversely selects against healthy individuals in favour of individuals with poor health  6 fewer Pareto improving exchanges
	<ul> <li>Imperfect information (moral hazard): (insurance market) <ol> <li>Buyer has more information about his health condition than seller + seller unable to adequately monitor buyer's behaviour</li> <li>Buyer more willing to take on high-risk activities since covered by insurance</li> <li>Increase likelihood of insurance payout → more claims, rise in cost → companies charge higher premium to protect profit</li> <li>Insurance companies' cost rise to the point that they no longer make profit → no longer provide service → missing market</li> </ol> </li> </ul>
	<ol> <li>Imperfect information (supplier-induced demand):         <ol> <li>Seller has more knowledge than buyer, profit-maximising seller uses superior knowledge to influence demand in his self-interest → perceived MPB &gt; actual MPB</li> <li>Shaped by imperfect information, consumers consume up to private eqm level Qp where perceived MPB = MPC</li> <li>Socially optimal level at Qp where MSB = MSC</li> <li>Over-consumption → DWL</li> </ol> </li> </ol>
	<ul> <li>Imperfect information (efficiency wage theory &amp; real wage unemployment)</li> <li>1. Firms have imperfect info about worker productivity (monitoring of workers is costly or impossible) → workers incentivised to shirk as less likely to be caught for shirking</li> <li>2. To discourage shirking, firms pay higher wages to raise marginal cost of shirking (lost of income when fired from job)</li> <li>3. Wages above mkt eqm wage → surplus labour → unemployment</li> </ul>



#### Frictional unemployment:

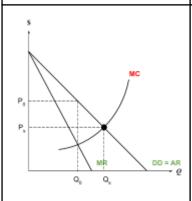
- Workers have <u>imperfect info</u> about types of jobs available Employers have <u>imperfect info</u> about type of available labour (due to high search cost involved in acquiring information)
- 2. Workers are w/a to work at prevailing wage rate, actively searching for jobs but do not have jobs
- 3. <u>Pareto improving exchanges</u> do not take place: workers get higher income, employers make higher profits
- 4. Productive inefficiency as o/p of G&S is below its potential o/p (opp cost of unemployment is the o/p forgone) → society's welfare below max attainable level



#### **Factor immobility**:

Occupational / geographical immobility: inability of factor FOP to shift between occupations / locations — unemployment of resources (point lies inside PPC)

- 1. Moving from point will lead to improvement in society's welfare with more output produced, more wants can be satisfied and higher level of utility attained
- 2. Raise production of one good without sacrificing production of another good
- 3. Factors of production left idle, society incurs opportunity cost in terms of forgone output → society's welfare below max attainable level

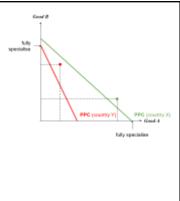


#### Market dominance:

- 1. In imperfect market structure, firm possess <u>market power</u> → price setting ability → downward sloping DD curve
- Allocative efficiency: society produces and consumes a combination of G&S that maximises welfare → society's valuation of last unit of G&S (Price) is equal to value of resources that go into producing that last unit of G&S (Marginal Cost) → P=MC
- 3. Profit-maximising output at Q<sub>0</sub> where MR=MC, charge price P<sub>0</sub> given DD
- 4. Socially optimal output at Q<sub>s</sub> where P=MC (MSB=MSC)
- 5. Underproduction of G&S as  $Q_0 < Q_s$
- 6. Over  $Q_0Q_s$  units, value of benefit to society > cost incurred by society in producing one additional unit  $\rightarrow$  loss of net potential benefit to society  $\rightarrow$  DWL

Circular flow of income	Measurable Fines  Cannagetion (C)  Springs (R)  Financial Markets becomes (R)  Trans (T)  Conversed separate (S)  Imports (M)  Facelys socker  Experis (D)	<ol> <li>State component being affected, which of the 4 factors</li> <li>Diagram of circular flow of income (label each arrow of diagram)</li> <li>Multiplier process (k), explain growth due to injection / withdrawal. Magic number being k=0.6, initial injection / withdrawal of \$1000</li> <li>Give specific example (apply context of question, identify correctly which component is being affected)</li> </ol>		
Macro indicators	_	Memorise definitions, explanations, and limitations of indicators		
AD-AS	P <sub>2</sub> P <sub>1</sub> P <sub>0</sub> AS AD <sub>2</sub> AD <sub>1</sub> AD <sub>2</sub> AD <sub>1</sub> AD <sub>2</sub> AD <sub>3</sub> AD <sub>4</sub> AD <sub>4</sub> ANY	<ol> <li>AD song: (AD increase)</li> <li>AD increase from AD<sub>0</sub> to AD<sub>1</sub></li> <li>Firms faced with <u>unplanned disinvestment</u> (unplanned fall in inventories) as firms draw down stocks to meet unanticipated increase in AD → <u>increase o/p</u> in next production cycle to restore inventories to optimal level</li> <li>Firms enter factor mkt to <u>demand for more FoP</u> (incl labour), pay out <u>more factor income</u></li> <li>Through <u>multiplier effect</u> (spending creates income, income generates more spending), AD increase further from AD<sub>0</sub> to AD<sub>2</sub></li> </ol>		
	P <sub>q</sub> P <sub>t</sub> AS	<ul> <li>AS song: (AS increase)</li> <li>1. Firms experience decrease in uCOP, profits increase, firms incentivised to increase o/p, hire more FOP including labour</li> <li>2. Firms facing market competition pressure pass on part of cost savings to consumers, lower prices of final G&amp;S from P<sub>0</sub> to P<sub>1</sub></li> </ul>		
	Additional graphs: MEI, PPC, DD-SS for exchange rate	Anchor on goals: 4 macro goals, E&E, consumer surplus/utility, SOL		

# Theory of Comparative Advantage



Law of Comparative Advantage: trade can be mutually beneficial to all countries if they specialise in production of goods in which they have comparative advantage

- Country X: <u>opp cost</u> of producing additional unit of A is lower → <u>CA</u> in production of A Country Y: opp cost of producing additional unit of B is lower → CA in production of B
- Country X <u>fully specialise</u> in production of A Country Y fully specialise in production of B
- 3. <u>Trade</u> with each other for goods which it does not have CA in Country X exchange *x* units of A (export) for *x* units of B with country Y (import)
- 4. Consumption outside PPC is possible

# **Policies**

DD-SS	Firms (oligopoly)	Market failure	Macro	Trade
Indirect tax Indirect subsidy Price ceiling Price floor Quota	Price competition - Price war - Limit pricing - Predatory pricing - Price discrimination - Price rigidity Non-price competition - Product differentiation - M&A - Diversification Collusion - Cartel - Price leadership	Public goods - Direct provision Externality - Subsidy, free provision - Tax, ban - Moral suasion - Tradable permits (cap-and-trade) Imperfect information - Moral suasion - Legislation - Tax, subsidy Factor immobility - Continuing education and training (CET) - Move workers to jobs / move jobs to workers Market dominance - MC, AC pricing - Antitrust law, market liberalisation - Nationalisation - Lump-sum tax	Fiscal – EFP, CFP Monetary – EMP, CMP SS-side BOT – Expenditure-switching / reducing	Expenditure-reducing / switching FTA Tariff, import quota, (export) subsidy, regulatory barriers, embargoes and sanctions