Zig Zag Education

Economics

A Level | OCR | H460

Topic Tests

Microeconomics: A Level Year 2

zigzageducation.co.uk

POD 9757

Contents

Teacher's Introduction

This resource consists of a set of Topic Tests that have been written to support the teaching of OCR A Level Year 2 Microeconomics. It allows teachers and students to check their understanding and consolidate knowledge of each part of the OCR specification. In each Topic Test there is a mixture of numerical, multiple-choice, short-answer and essay-style questions of a variety of different difficulties. There are eleven Topic Tests in this resource in which the OCR specification has been grouped in a theoretically logical manner.

Importantly, each Topic Test is accompanied by a set of detailed answers that could be handed out to students as a basis for 'model' answers in the examination. Note that although the Topic Test questions aren't always in exam format, the questions within have been written carefully with the intention of testing the range of assessment objectives and often borrow aspects that are similar to those in the exam.

Most of the case studies in the Topic Tests include up-to-date economic data and scenarios that should place economic theory in recent history, enrich students' general knowledge of the subject, and prepare students for the Data Response aspects of the examination. Moreover, the resource also includes plenty of opportunities for students to practise the Quantitative Skills outlined in the Appendix of the OCR specification.

Each Topic Test contains up to 40 marks worth of questions, although occasionally the tests include an additional number of marks in order to fully cover the OCR specification. It is intended that a 40-mark Topic Test will take about one hour to complete and should be presented to students *after* teaching the parts of the specification that are to be tested. However, the Topic Tests could also be given to students as homework in order to consolidate their knowledge outside of the classroom, or certain aspects could be used as a supplement to in-class learning.

It is important to note that this resource should be used as a complement to other resources such as textbooks and practice exam papers, and not in isolation. These Topic Tests include plenty of explanation of the theory in the mark scheme, but students should be encouraged to access information as widely as possible.

It is hoped that this resource, as well as offering support for teaching the essential elements of the OCR A Level Year 2 Microeconomics specification, will help students fully prepare for their A Level examinations. The economic environment is constantly in flux, and full of fascinating current issues. This resource attempts to share some of these current issues as a basis for teaching in the most interesting way possible, meanwhile encouraging further study from the next generation of Economists!

Happy teaching!

August 2019

Mark Scheme: Levels of Response Tables for Long-answer Ques

8 marks

		Knowledge (1), application (1) and analysis (3)
	0	No relevant answer given.
Level 1	1–3	Some knowledge of economic concepts is shown, partially linked to the q skills, but may focus too much on one side of an argument.
Level 2	4–5	Knowledge of the economic concepts is very accurate. Links to the questi examples. Analysis is well reasoned and logical, and appropriate for the q
		Evaluation (3)
	0	No evaluation.
Level 1	1	Limited attempt at evaluation – may be only loosely related to the questi reasoning.
Level 2	2–3	Accurate, balanced evaluative comments are made, supporting a rounde to the question.

10 marks

		Knowledge (2), application (2) and analysis (2)
	0	No relevant answer given.
Level 1	1–2	A few concepts may be identified correctly, but inconsistently, and with i behind the causes and effects.
Level 2	3–4	Some knowledge of economic concepts is shown, partially linked to the q skills, but may focus too much on one side of an argument.
Level 3	5–6	Knowledge of the economic concepts is very accurate. Links to the questi examples. Analysis is well reasoned and logical, and appropriate for the q
		Evaluation (4)
	0	No evaluation.
Level 1	1–2	Limited attempt at evaluation – may be only loosely related to the questi reasoning.
Level 2	3–4	Accurate, balanced evaluative comments are made, supporting a rounde to the question.

15 marks

		Knowledge (3), application (3) and analysis (3)
	0	No relevant answer given.
Level 1	1–3	A few concepts may be identified correctly, but inconsistently, and with behind the causes and effects.
Level 2	4–6	Some knowledge of economic concepts is shown, partially linked to the reasoning skills, but may focus too much on one side of an argument.
Level 3	7–9	Knowledge of the economic concepts is very accurate. Links to the ques examples. Analysis is well reasoned and logical, and appropriate for the
		Evaluation (6)
	0	No evaluation.
Level 1	1–2	Limited attempt at evaluation – may be only loosely related to the ques reasoning.
Level 2	3–4	Clear evidence of evaluative comments, though they may be unfairly w argument. Reasoning / supporting evidence is provided but may be inc
Level 3	5–6	Accurate, balanced evaluative comments are made, supporting a round directly to the question.

20 marks

		Knowledge (4), application (4) and analysis (6)
	0	No relevant answer given.
Level 1	1–3	A few concepts may be identified correctly, but inconsistently, and wit behind the causes and effects.
Level 2	4–6	Some knowledge of economic concepts is sh partially linked to the basic reasoning skills.
Level 3	7–10	Good knowledge of the rel economic concepts is displayed, linked evidence to sup t th arguments. Analysis is well developed, bu of an ar n
Level 4	11	nowledge of the economic concepts is very accurate. Links to the que amples. Analysis is well reasoned and logical, and appropriate for the
		Evaluation (6)
	0	No evaluation.
Level 1	1–2	Limited attempt at evaluation – may be only loosely related to the que reasoning.
Level 2	3–4	Clear evidence of evaluative comments, though they may be unfairly w argument. Reasoning / supporting evidence is provided but may be inc
Level 3	5–6	Accurate, balanced evaluative comments are made, supporting a round directly to the question.

25 marks

Level of Response	Re
5	Strong answer with well-gro valuation • Clear understa g economic ideas • Applie to the question, using supporting data where nee S en-reasoned analysis St ong, well-supported evaluation
4	Strong answer, with some good evaluation • Clear understanding of the economic ideas • Applied accurately to the question, using supporting data where nee • Some sound, well-reasoned analysis • Reasonable evaluation content, with some support
3	Reasonable answer, but poor evaluation • Adequate understanding of the economic ideas • Satisfactorily applied to the question, using some supporting data • Adequate analysis, might be underdeveloped or lacking in detail • Reasonable attempt at evaluation, but lacking support for arguments
2	Fairly weak answer • Limited understanding of economic ideas • Loosely applied to the question • Limited analysis, may be unfocus rrect • Limited attempt at eval ikely to be unsupported
1	Weak answer • Poor of relevant economics analysis • Unsupported or irrelevant evaluation

Mark Breakdown Test-by-test

Topic Test 2.7	
Question	Mark
1	2
2(a)	2
2(b)	2
3	2
Total	**8**

Topic Test [illegible]	
Question	[illegible]
1	2
2	3
3	1
4	2
5	15
6	1
7	2
8(a)	2
8(b)	2
9	10
Total	**40**

Topic Test 2.10	
Question	Mark
1	2
2	1
3	[illegible]
4(a)	[illegible]
4(b)	2
5	3
6	6
7(a)	4
7(b)	2
8	2
9	4
10	10
Total	**40**

Topic Test 3.1, 3.3	
Question	Mark
1	4
2	4
3	[illegible]
4	[illegible]
5	1
6	1
7	2
8	2
Total	**19**

Topic Test 3.2	
Question	Mark
1	2
2	14
3	2
4	1
5	[illegible]
6	1
7	2
8	2
9	1
10	2
11(a)	2
11(b)	2
12	4
Total	**42**

Topic Test 4.1	
Question	Mark
1	4
2	2
3	4
4	8
5(a)	[illegible]
[illegible]	2
Total	**24**

Topic Test 4.2	
Question	Mark
1	3
2	4
3	2
4	1
5(a)	2
5(b)	2
6	4
7	2
8	1
9	6
10	[illegible]
[illegible]	8
[illegible]	**41**

Topic Test 4.3	
Question	Mark
1	2
2	4
3	6
4	4
5	2
Total	**18**

Topic Test 4.4–5	
Question	Mark
1	2
2(a)	2
2(b)	2
2(c)	2
2(d)	2
3	4
4	4
5(a)	2
5(b)	2
5(c)	2
6	2
7	6
8	4
9	4
Total	**40**

Topic Test 5.1–2	
Question	Mark
1	1
2	4
3	4
4	2
5	4
6	1
7	2
8	2
9	4
10	4
11	2
Total	**30**

Topic Test 2.7: The Concept of the Margin

1. Explain the concept of the 'margin' in economics.

2. Table 1 shows information on the utility to an economic agent of eating diffe
Snickers bars.

Table 1

Number of [illegible] bars	Total utility (measure
1	30
2	50
3	60
4	65
5	60
6	45

   (a) Calculate the *marginal* utility of eating an additional Snickers bar if the i
   eaten two.
   (b) Calculate the *marginal* utility of eating an additional Snickers bar if the i
   eaten five.

3. Explain the significance of the marginal concept in economic decision making

Topic Test 2.9: Information Failure

1. What is meant by 'information failure'?

2. State **three** examples of information failure.

3. Asymmetric information refers to which of the following?
   A A situation in which market participants have access to exactly the same
   B A situation in which a market participant has access to information abou
   but not the future.
   C A situation which arises whenever there is an imbalance of information be
   economic transaction – that is, one participant has more, or better, infor
   D A situation in which access to information varies according to one's geog

4. What is meant by 'moral hazard'?

5. Table 1 outlines some scenarios in which information failure could be occurri

Table 1

(a)	Ahmed is astonished at the price of brand-new automobiles and purchase one that is second-hand – after all, Ahmed wisely belie point purchasing something new if it's just going to lose its value hand car dealer has picked out a vehicle that fits Ahmed's budge to be true, but Ahmed isn't sure.
(b)	Li is a director at a large international investment bank. She's acq a government initiative to prohibit fossil fuel usage because of th environmental impact. Li is aware that this policy is going to mark shares in First Solar, a renewable energy company, overnight. She about the government policy before it is announced so that he ca
(c)	Jess is a lead-engineer at an international electronics firm. Jess firm's latest mobile phone and is aware of a design fault which cau occasion if subject to humid environments. Jess has decided to co her superiors; it's too late to change the design as the product has she knows that she's close to getting the promotion she's been wo
(d)	Dave is applying for health insurance. Dave knows about a history which is likely to increase his healthcare expenditure in the future. and has been known to drink heavily on occasion. Insurance comp from testing their clients because the government feels that it wou
(e)	Vikesh is a doctor in the NHS. Vikesh has malpractice insurance w liability in the case of a serious error during surgery. Vikesh decid general anaesthetic that is slightly out-of-date, but he thinks eve Unfortunately, his patient passes away during surgery.

Identify the information failure for each of the scenarios (a–e), and explain h lead to market failure.

6. Which of the following is an explanation of a 'merit good'?
   A Merit goods are goods that governments feel would be under-consume because consumers do not realise their true benefit.
   B Merit goods are all goods that produce positive externalities.
   C Merit goods are goods awarded to people that are deserving of praise a
   D Merit goods are goods that governments feel would be over-consumed consumers do not realise the true cost of their consumption.

7. State **two** examples of a merit good.

8. (a) What is meant by a 'demerit good'?
   (b) What role does information failure play in existence of demerit goods?

The UK's favourite drug is not cannabis, or cocaine, as most politicians would have y
that starts with a 'C'… caffeine. While the UK has traditionally been a tea-loving so
the most popular stereotype of what it is to be British – preferences are changing.
63% between 1974 and 2014 as consumers have begun to opt for higher caffeine
coffee and sugary energy drinks. Tea has about 11mg of caffeine per cup, while a
about 375mg in it. Likewise, the rise of international coffeehouses, such as Starbucks, h
as the marketing techniques of global brands such as Red Bull. Consumption of coffe
1970s. What this means is that caffeine consumption has risen overall in the UK pop
caffeine, like other drugs, is not a benign substance. Caffeine consumption has been
pressure, insomnia and incontinence. Perhaps most worrying is that caffeine consump
heart attacks among young adults with mild hypertension – in fact, the risks increase
four cups of coffee have been consumed, and by a magnitude of three for more mo
caffeine's status as a legal substance erroneously leads people to believe that it is s
effect is massive, and dangerous, overconsumption!

9. Using information from the extract and a suitable diagram, evaluate whether
considered a demerit good.

Topic Test 2.10: Public Goods

1. What is meant by a 'public good'?

2. 'Excludability' refers to which of the following concepts?
   A It is possible to prevent people that haven't paid for the good from cons to it.
   B It is impossible for two individuals to consume the good simultaneously.
   C It is possible to reject the consumption of the good when it is provided p
   D It is possible for two individuals to consume the good simultaneously.

3. What is meant by the non-rivalry of a public good?

4. (a) If something is non-rejectable, what is true of this type of good?
   (b) State **two** examples of a good that is non-rejectable.

5. Identify which of the following are public goods.

(a)	Cinemas	(e)	Lighthouses
(b)	Healthcare	(f)	Timber
(c)	Air	(g)	Fireworks
(d)	Bananas	(h)	Electricity

6. Assess how the existence of a public good creates a market failure.

7. Quasi-public goods – meaning 'almost' public goods – are goods that are eith rivalrous, or non-rivalrous but exclu
   (a) Identify and explain an example of each type of quasi-public good.
   (b) Do you think market failure could still occur in the case of a quasi-public

8. Explain the reason that a public good exhibits zero marginal cost once provid

9 Explain **two** advantages of public–private partnerships to overcome the mark public goods.

It should be of no surprise that national defence is an important talking point in mod of measures that are being undertaken by governments to improve the security of t organisation the NSA, for instance, is a controversial agency that monitors, collects, the communication of American citizens in order to protect against domestic threats the UK, is a nuclear submarine defence system that some people think of as critical systems of national defence are public goods in the truest sense. It seems natural th civilian doesn't prevent another from being simultaneously defended. Moreover, pe whether they're defended or not once the system is in place. Of course, people can on national defence, but this moral objection isn't quite the same as a rejection of th impossible to exclude certain people benefiting from defence. If the defence systen scale then people will benefit regardless of whether they've paid into the system or for a government to consider only defending certain individuals in society.

10. Evaluate the case for government provision of a national defence system.

Topic Test 3.1 and 3.3: Business Objectives, Revenue an

1. In Economics, we typically assume firms are aiming to maximise profits. Expla maximisation objective and why a firm might choose that objective.

2. Explain **two** non-maximising business objectives.

3. Explain **two** reasons that a firm's manageme t might choose to satisfice rath

4. If a hotdog manufacturer sel 0,000 hotdogs at a price of £0.05 per uni would be this firm' t r enue?
   A £
   B £1
   C £10,000
   D £100,000

5. In January, a luxury umbrella salesperson sold 500 umbrellas and made a tot Which of the following is this salesperson's average revenue?
   A £0.16
   B £16
   C £160
   D £1,600

6. If a bakery increases output of hot-cross buns from 100 to 200 units, its tota to £160. Which of the following is this bakery's marginal revenue in increasin
   A £0.06
   B £0.60
   C £6.00
   D £60.00

7. Explain the differ t between 'accounting' and 'economic' profit.

8. Explain ference between super-normal and normal profit.

Topic Test 3.2: Costs and Economies of Scale

1. What is meant by the term marginal cost?

2. Table 1 shows partial details on a firm's production costs.

Output ('000)	Total fixed cost (TFC)	Average fixed cost (AFC)	Total variable cost (TVC)	Average variable cost (AVC)	Total cost (TC)
1	£12,000	**(a)**	£2,000	£2	**(b)**
2	£12,000	£6	£3,500	**(c)**	£15,50
3	£12,000	£4	**(d)**	£1.50	£16,50
4	**(e)**	£3	£7,000	£1.75	£19,00
5	£12,000	£2.40	£12,500	£2.50	£24,50

Calculate values for (a–g). Show your working.

3. Explain the difference between the short- and long-run.

4. Explain the significance of 'diminishing marginal returns' in Economics.

5. Illustrate, and explain, the relationship between short- and long-run average

6. Which of the following is a correct explanation of the concept of 'minimum e
   A MES is the level of output consistent with the minimum point of a firm's
   B MES is the level of output at which there is no market failure.
   C MES is the level output necessary for a firm to officially be declared a mo
   D MES is the level of output consistent with the minimum point of a firm's

7. Explain the relationship of Minimum Efficient Scale (MES) to an industry's ma

8. What is meant by the term 'economies of scale'?

9. Lower per-unit costs that are achieved by the expansion of the individual firm
   following type of economies of scale?
   A External economies of scale
   B Internal economies of scale
   C Internal diseconomies of scale
   D External diseconomies of scale

10. Identify and explain an example of an internal economy of scale.

11. (a) What is meant by external economies of scale? Provide an example.
    (b) Identify and explain an example of an external economy of scale.

12. Assess **two** benefits of economies of scale to a business

Topic Test 4.1: Perfect Competition

1. Explain what is meant by a *perfectly competitive* market.

2. Explain what is meant by 'barriers to entry'.

3. Explain, using a diagram, the reason that an individual firm's demand curve is

4. Why is it only possible for firms to make super-normal profits in the *short-run* competitive market?

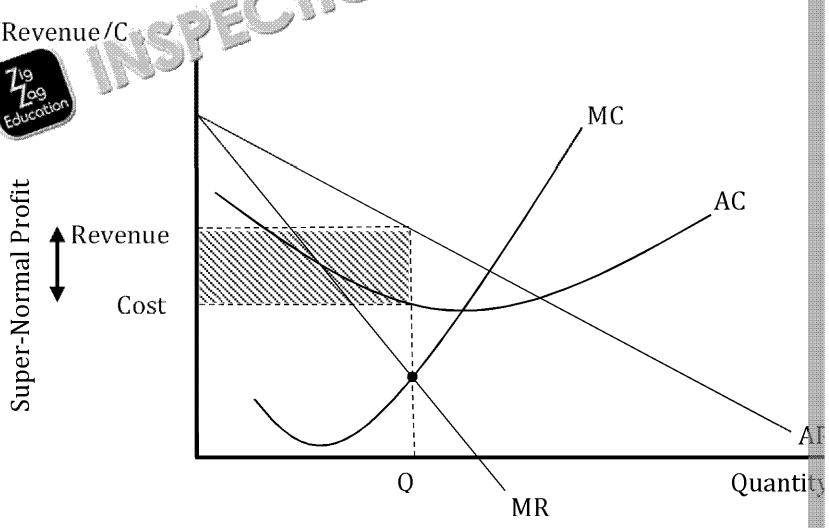
5. (a) Explain, using an appropriate diagram, how perfect competition can result in an efficient allocation of resources.
   (b) Explain **one** reason that this allocation of resources might not be allocati

Topic Test 4.3: Monopolistic Competition

1. Monopolistic competition is *similar* but not exactly the same as the perfect comp
assumed that there are many firms in the market, and that there are zero barrier
assumption of homogeneity of products is relaxed – that is, monopolistic compet
differentiation. Monopolistic competition is an 'imperfect' competition model wh
real-life markets – e.g. there are many restaurants in a city, but each sells a slight

*[2 marks for a clear explanation of how monopo[illegible] co[illegible]petition differs from perf
explanation that is less clear but conveys t[illegible]e[illegible] meaning]*

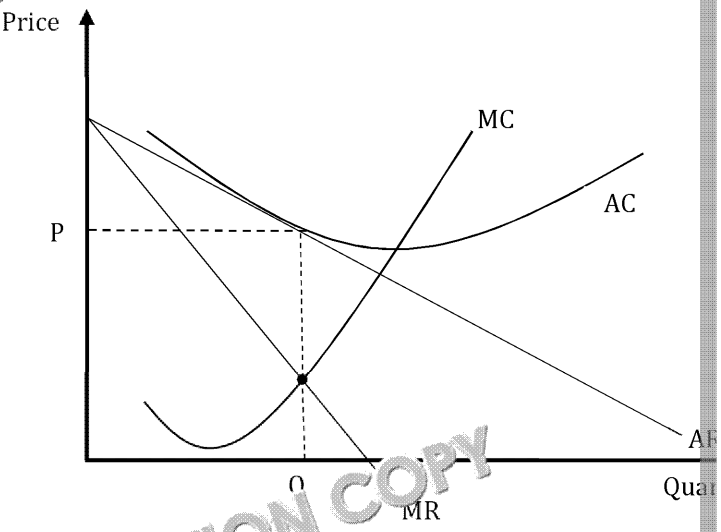
2.



Note that this diagram is identical to that of a monopoly in the short- and lo
In the short-run in a monopolistically competitive market, profits made by busin
market structure can be at any level. In the diagram above, the business is m
indicated by the shaded area.

*[1 mark for correctly labelled axes; 1 mark for correctly drawn MR and AR curves;
AC curves; 1 mark for [illegible] the equilibrium at the profit-maximising point]*

3.



Freedom of entry – that is, [illegible] barriers to entry – is an important characteristic
it limits the ability of firms to make super-normal profits in the short-run. If a rep
normal profits then other firms will be attracted to the market because businesse
A condition of a monopolistic market is that there are barriers to entry preventin
and eroding the incumbent firm's profit, but in a monopolistically competitive ma
and so there is nothing that prevents this from occurring. Firms in monopolistica
differentiated products, so when new firms are attracted to the market this tends
the incumbent firm's product. Essentially, then, this implies that the individual fi
shift to the left as some consumers shift consumption to the new entrant.

Freedom of entry is the condition that is necessary for the monopolistically comp
long-run equilibrium. Eventually, super-normal profits will be eroded as demand
number of firms in the industry until there is no profit incentive to attract other f
Monopolistically competitive firms will, of course, still profit-maximise (MR = MC
output associated with maximisation will be the point at which total revenue exa
Note that if firms attempt to defend their market position through, say, advertisi
and shift the average cost curve upward, accelerating the process.

*[Maximum 6 marks. 5–6 marks for a clear analysis supporting the answer with an
marks for the answer satisfactorily applied to the question, using some supporting
attempt at evaluation that is underdeveloped]*

4. Advantages: Product differentiation leads to more choice for consumers. Low ba
contestability might encourage innovation, leading to improvements in produc
The differentiation might be only the illusion of choice for consumers (e.g. brandi
distinguished products. Some of the differentiation is arguably inefficient use of r
convey a brand, which also has environmental costs. Compared to perfect compe
than the marginal cost, equilibrium in monopolistic competition is not allocativel

*[2 marks for each clearly explained advantage/disadvantage (one of each); 1 mark
clear but which conveys the general meaning]*

5. It is important for firms that operate in a monopolistic market to differentiate the
competition because it allows them to essentially create an 'individual' market in
effectively as a monopoly and become a price-setter rather than price-taker. If th
London's fast-food sector sold homogenous products there would be no room for
would shift their demand to a firm selling *exactly* the same product.

*[2 marks for a clear explanation of the importance of non-price competition for a m
market; 1 mark for an explanation that is less clear but which conveys the general*

Topic Test 4.4–5: Oligopoly and Contestable Markets

1. Oligopoly is an imperfectly competitive markets structure in which there tends t dominating the market, and these firms exhibit a degree of interdependence.

   [2 marks for a clear explanation of oligopoly; 1 mark for an explanation that is les general meaning]

2. (a) If Airbus chose a 'high' pricing strategy, the best response for Boeing would strategy in order to undercut by its competitor and cream off revenue from its payoff would be 10, but if it chooses 'low' its payoff is 15. Therefore, Boei choose 'low' when its competitors chooses 'high.'

   (b) If Airbus chose a 'low' pricing strategy, the best response for Boeing would b to lower in order to avoid being undercut its competitor. If Boeing were to choos would be 1, which is less than the payoff of 5 it can expect when adopting th Boeing's best strategy would be to choose 'low' when its competitors choos

   (c) Notice that Boeing's strategy regardless of Airbus' decision should be to adop this is Boeing's *dominant strategy* because it is the strategy it should play in o payoff irrespective of what Airbus chooses to do. Moreover, since the table is strategy will also be to adopt a 'low' price point. Therefore, the market outco strategy in which each manufacturer earns a payoff of 5. Neither Boeing nor A equilibrium because by choosing 'low' they are maximising their pay-off give

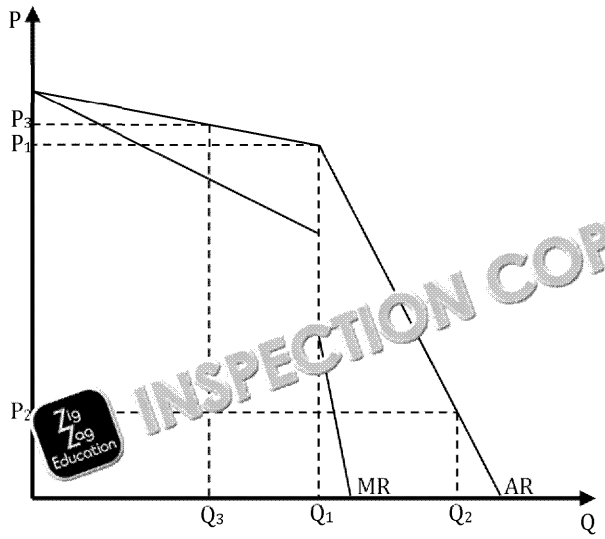
   (d) Notice that a 'low' pricing strategy equilibrium rewards Boeing and Airbus w however, is not the best possible outcome for either airline manufacturer – plays a 'high' strategy and receives a payoff of 10 each. But, neither Boeing n strategy to 'high' without communicating with each other. If they could com to a 'high' price strategy that would yield them a payoff of 10, instead of a pa *outcome, however, will reflect on the incentives for the airline manufacture formed. Boeing or Airbus could undercut the cartel by sneakily offering a lowe additional market share at the expense of its competitor.*

   [Maximum 2 marks for each correct answer. Award 1 mark for each correct answe explanation supporting the answer.]

3. Non-price competition is important in oligopolistic markets because it can help f price competition and price wars. Interdependence is an important characteristi firm's pricing decision will have effects on the pricing decisions of other firms. W $2.00 deal, it was immediately responded to by its closest competitors. Ultimatel the profitability of these firms – something they no doubt would be keen to avoid choose to invest in advertising in order to differentiate their product without hav its competitors could also compete on the basis of quality and product differentia offer loyalty cards in order to incentivise return visits and gain market share. Ess can help oligopolistic firms avoid a destructive price war. Yet, non-price competi copy the strategy – e.g. if McDonald's offers a 'premium' meal, its competitors co similar. Moreover, if the cost of implementing a non-price strategy exceeded the might choose to engage in a price war instead (especially if they can absorb the d

   [3–4 marks for a well-argued assessment of the significance of non-price competiti 1–2 marks for a less clear argument; 0 marks for unrelated response]

4.



The kinked demand curve model of an oligopoly is a model that is intended to ex of oligopolistic firms. It highlights the effect of a firm's pricing decisions on the be firms in the oligopolistic market.

The kinked demand curve model recognises that the price elasticity of demand fo to depend on the reaction of rival firms.

First, competitors are *not* expected to match any price increase of the individual profitable to undercut the firm instead. Therefore, the firm's demand curve *above* likely to be price-elastic because any increase in price is expected to lead to a dis quantity demanded.

Second, competitors are expected to mat[illegible]y price decrease of the individual fi share and profitability. Therefo[illegible] firm's demand curve below the initial price inelastic because the price decreases are matched by the competition and this pr output demanded increasing substantially.

Therefo[illegible]e the PED for prices above P_1 (e.g. P_3) is *elastic*, the firm could incr price, and, since the PED for prices below P_1 (e.g. P_2) is *inelastic*, the firm could in price. Hence, prices tend to be stable and interdependent in an oligopoly.

[Up to 2 marks for a clear, labelled diagram, and up to 2 marks for a clear explanat decisions]

5. (a) $CR_3 = 27.6 + 16.1 + 15.7 = 59.4\%$

[1 mark for correct answer; 1 mark for showing working]

(b) $CR_5 = 27.6 + 16.1 + 15.7 + 10.4 + 6.8 = 76.6\%$

[1 mark for correct answer; 1 mark for showing working]

(c) Both the CR_3 and CR_5 measures of market con[illegible]tion would indicate that concentrated and, therefore, an oli[illegible]istic market. Just *three* firms (Tesco, significant enough proportion of the market at 59.4%, and adding the proce up to 76.6% which would make it one of the most concentrated UK industri

[2 fo[illegible] clear explanation of the reasons that the industry can be thoug explanation that is less clear]

6. Barriers to entry in an oligopolistic market can be split between *natural* and *artif* include things such as economies of scale of incumbent firms, resource ownershi Artificial barriers include uncompetitive pricing strategies, high marketing costs

[Maximum 2 marks. 1 mark per correct response.]

7. Advantages:
   - *Research and Development:* Like monopolies, oligopolies tend to make super
   competitive markets only make *normal* profit. Therefore, oligopolies can als
   Investment in capital is essential for an economy's long-term growth, so fro
   be viewed positively. Oligopolies are 'dynamically efficient'.
   - *Price Stability:* If an oligopoly is tacitly collusive rather than competitive, the
   stability because firms will tend to invest in safer, non-price competition. Ho
   competitive nature there might be price volatility [illegible]ms engage in price w
   benefit consumers).

   Disadvantages:
   - *Reduce Consumer Choice:* Oligopolies can reduce choice, decreasing consum
   number of firms [illegible]produce a small number of products relative to a perfe
   - *Price by cartels:* If firms in an oligopoly form a cartel, prices might be fix
   wi[illegible]l reduce consumers' standards of living. However, luckily forming
   so this disadvantage occurs only infrequently.
   - *Inefficient:* Oligopolies are unlikely to be productively or allocatively efficien
   competition.

   *[Maximum 6 marks. 5–6 marks for a clear evaluation mentioning both one advantage
   oligopoly; 3–4 marks for clear evidence of evaluative comments, though they may be u
   argument; 1–2 marks for providing a limited evaluation and failing to address either*

8. William Baumol developed the theory of contestable markets, in which the prese
   exit can produce a competitive equilibrium even in a market dominated by a sma
   the presence of zero barriers to entry means that incumbent firms will voluntaril
   equal to their average cost and only make *normal* profit in the long-run because p
   other firms that are readily able to enter the market. If there are no barriers to en
   and technology are freely available; resources are not controlled by the incumbe
   brands, etc. – then entrants could enter the market without a competitive disadva
   firm's super-normal profit. Moreover, the lack of barriers to exit means that firms
   any super-normal profits have been eroded - this is also known as a strategy of '
   Therefore, in order to avoid hit-and-run competition, its best for incumbent firms
   strategy, and instead price at [illegible]normal profit level. Hence, the behaviour of busin
   the actual competition is [illegible]out the threat of competition.

   *[Maxim[illegible]na[illegible] clearly explaining the significance of zero barriers to entry
   2 mark[illegible] explanation that is less clear but conveys the general meaning]*

9. Primarily, the most important advantage of a perfectly contestable market is that
   competition forces firms to price output such that only normal profit is being ma
   output at a level that is consistent with super-normal profit – e.g. the profit-maxi
   the market and erode this profit away. Therefore, the incumbent firm tends to pr
   avoid the threat of hit-and-run competition.

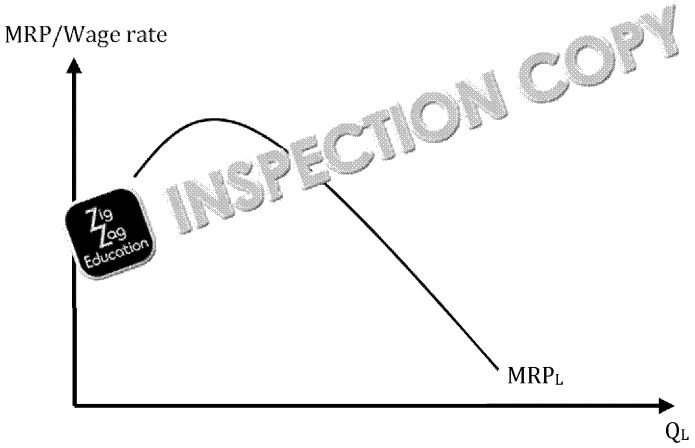
   Moreover, in the long-run firms operating in a contestable market will produce a
   cost curve, and, therefore, contestable markets can produce a situation of produc
   operating at the bottom of its average cost curve, an entrant that can produce at l
   produce at the bottom of theirs and undercut the incumbent in terms of price. In
   costs in order to stay competitive in the industry. Hence, over time firms in conte
   a productively efficient level. Moreover, because AR *must* equal AC, the firm will
   because MC cuts the bottom of the AC curve.

   Contestability also implies that the price [illegible] might be lower than in a mon
   Therefore, in such markets there [illegible]d be higher consumer surplus. However, c
   prices fluctuate more of[illegible]ncumbent firms regularly try to cream off profit an
   and-run competition. [illegible]e stability is an important macroeconomic policy objec

   [1 mar[illegible]vantage identified (up to 2); 1 additional mark per advantage asses

1. *Real* – Real wages are adjusted for the effects of inflation. It is important that non changes in the price level because it is purchasing power that is important for an

   [1 mark for correct response]

2. 

   The Marginal Revenue Product (MRP) curve shows the maximum price a firm wou unit of a factor of production. In understanding the MRP theory of labour demand, demand for labour is derived not from the inherent appeal of labour, but because o production to produce output – that is, the demand for labour is a *derived* demand. determined initially by the output that it can produce. However, because of *diminis* the marginal product of labour decreases as it is increased relative to the other *fixe* – this implies that the marginal product of labour curve will be downward-sloping. product of labour is an interesting concept in itself, what is more important for firm for the output that is produced, because this is what ultimately determines profitab competitive market, the marginal revenue of output will exactly equal price (P=MR *product* of labour will simply equal the marginal product of labour multiplied by th curve, then, will be equal to the MRP of labour (MRP$_L$) over a range of quantities of to the point the MRP will equal its marginal cost (which is determined on

   [Maxim marks for a clear explanation of MRP theory of labour demand; 1–2 m clear bu explains the general meaning]

3. - *Increase in Marginal Productivity:* If the marginal productivity of labour incr acquires capital that boosts the marginal output per worker, there will be a marginal revenue product of labour. Therefore, at any prevailing wage, the f quantity of labour because it can produce a greater amount of output for ch all technological improvements will increase the demand for labour – evalu whether the technology is labour-augmenting or labour-saving.
   - *Increase in Marginal Revenue:* Since the MRP$_L$ is a combination of marginal p revenue, a change in marginal revenue will also change a firm's labour dem outward or inward depending on the direction of the change. In a *perfectly c* revenue is equal to the price level, so if there is an increase in price, a firm's to the right. Note that this highlights the fact that a firm's labour demand cu is a change in the demand for a firm's product, price fluctuations reflect thes labour also changes as a result.

   [Maximum 4 marks for clearly expl factors which would increase a firm's explanation that is less clear but ex the general meaning]

4. (Labou measures the efficiency of production by calculating a firm *per* lab t – either measured by the number of labourers, or labour hours.

   Unit labour cost (ULC) measures the cost per labour input, divided by output per *per worker* or *per labour hour* terms). Note that an equivalent way of expressing t divided by total output. Essentially, then, ULC provides a broad measure of the co

If a firm, industry, or economy becomes more productive – that is, more output can b will have the effect of reducing unit labour costs because the denominator of the ULC

[2 marks for a clear explanation of the relationship between productivity and unit l explanation that is less clear but explains the general meaning]

5. Figure 1 shows that there has been a marked difference in levels of productivity hour – between the UK and Ireland from 2010 onwards. While the UK's producti Ireland's productivity has increased dramatically. Ireland's productivity in 2016 The UK's, however, is only 0.9% greater.

Labour productivity has an effect on unit labour cost (ULC) by altering the total o of labour input. Therefore, Ireland's ULC in 2016 should be lower than the UK's, c labour more efficiently. Ultimately, this means that Ireland's cost of produc average this should influence the price of Irish products relative to the UK that Irish products should be cheaper than UK products because its costs of prod output of Irish firms more competitive in international markets than UK firms, ar in exports should deteriorate on the basis of this information.

However, an important problem in this analysis is that the effect will depend on t and the UK. Since ULC is measured by the total cost of labour divided by total out will depend on the initial total cost of labour. If Ireland's labour cost was signific with then it is not guaranteed that an increase in productivity will make Irish exp the UK's.

[Maximum 4 marks for a clear analysis of the impact on the UK of changing levels o for an adequate analysis, might be underdeveloped or lacking in detail]

6. **B** – Monopsony is a similar concept to monopoly only that there is a single *buyer* therefore exert their monopsony power in purchasing factors of production to in explanation of 'oligopoly,' **C** refers to the concept of a natural monopoly and **D** is, a monopoly.

[1 mark for correct response]

7. Otto's recent technological development will affect the elasticity of labour deman because one of the most important influences on elasticity is the availability of su is close to being a *perfect* substitute to labour, we would expect the elasticity of la wage rate for labour in the trucking industry increased, we would expect that tru Otto's technology because there is little difference between using automated tech industry. If, however, there were no substitutes for labour in the trucking industr of modern existence – we would expect an increase in truck driver's wages to be decreases in labour employment. Notice that the elasticity of labour demand wil substitutes, not just their availability. Otto's technology is actually cheaper than t we would expect labour demand to be more elastic in this case than if the techno $3,000,000.

[Maximum 2 marks for a clear and accurate explanation of how the elasticity of lab industry will be affected; 1–2 marks for an explanation that is less clear but explain

8. The proportion of labour cost to total cost; time-period (e.g. difference between s factor substitutability); price elasticity of demand for the firm's output.

[Maximum 2 marks. 1 mark per correct response.]

9. - *Demographic Changes:* If an economy's demographic changes, say, because the there is likely to be a positive effect on the supply of labour in all industries. Nat disproportionately to the death rate, the size of the economy's population shoul with an effect on labour supply. Immigration has a similar, but more rapid,
   - *Labour Force Participation:* Labour force participation refers to the proporti population that is 'active' – that is, employed or actively seeking employmen increases, this is akin to saying that the overall supply of labour has increase the labour market from the 50s onwards would be an example of an increas
   - *Wages in Alternative Jobs:* If the wage rate in an industry rises disproportiona the supply of labour in the higher-paying industry to increase – this is consiste

supply curve. Naturally, then, this means that there are less workers available therefore we would expect to see an inward shift of the labour supply at the p

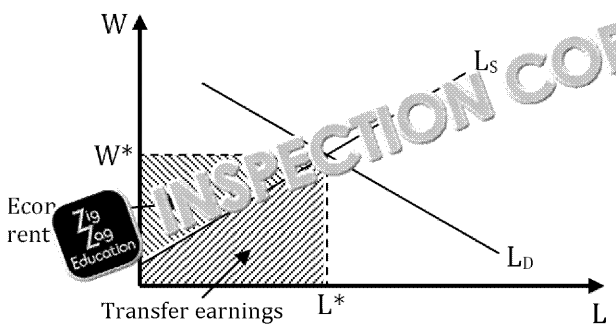
- *Non-Pecuniary Benefits*: Wages are not the only factor that individuals consi Industries that are more pleasant, for instance, are likely to have a greater s industries – think of the number of people willing to be sewage workers cor Industries that offer job security, training, pensions, and other benefits are l labour than industries that do not. Changes in non-pecuniary benefits will b position of the labour supply curve.
- *Non-wage Income:* Alternatively, labour sup[illegible] be influenced by the ava as benefit payments. If social security [illegible]s increase, we might see that s market as the perceived ben[illegible] switching from wage-paying employment t

[Maximum 4 mar[illegible] marks each for a clear explanation of non-monetary factors industr[illegible] supply; 1 mark each for an explanation that is less clear.]

10. It is likely that the labour supply for the Beefeater position is more inelastic than because of *occupational* and *geographic immobility*. Primarily, becoming a Beefea 22 years' service, and the position of Warrant Officer. Naturally then, the labour s be less flexible than for other military ranks because a great number of military p expertise required to become a Beefeater. Therefore, changes in Beefeater's wag significant increases in employment in this position. Second, because Beefeaters is a geographical obstacle in that even those with pre-requisite expertise to beco to move to London to perform the role. Individuals might not be able to afford Lo might already have emotional ties to a certain area, etc. This would make labour inflexible and hence wage increases might not necessarily bring about an increas

[Maximum 4 marks. 3–4 marks for clearly explaining the reasons why the labour su more inelastic in the short-run; 1–2 marks for a less clear explanation, with limited

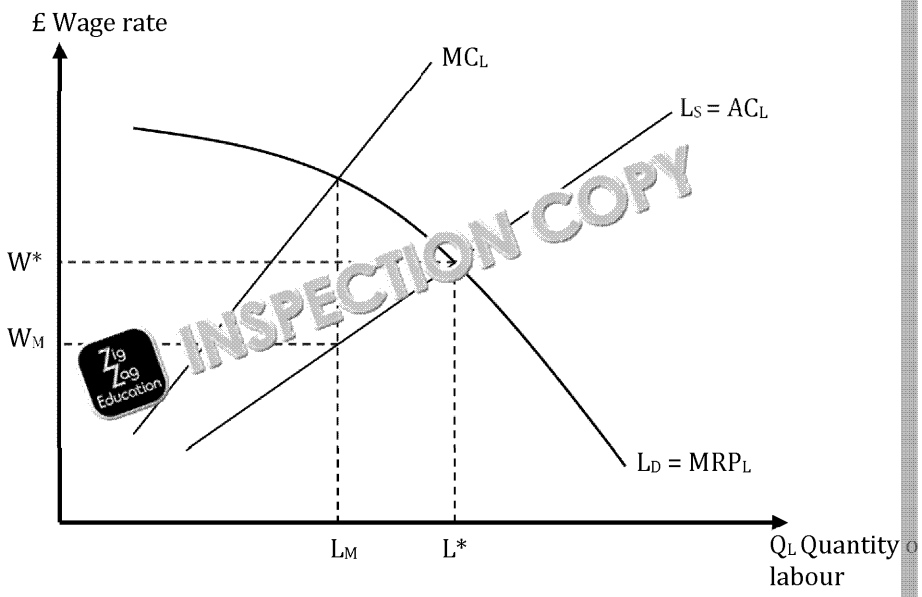
11.



Economic rent is defined at the payments made to a factor over and above its tra Transfer earnings are the minimum payments needed to keep a factor of product

[Maximum 2 marks for correctly illustrating the difference between transfer earni a less clear illustration but overall conveys the general meaning]

1.



Monopsony refers to a situation in which there is a single buyer in a market. If th market it is no longer true that the monopsonist firm must accept the prevailing case in a perfectly competitive labour market. Instead, the monopsonist faces a n directly. Therefore, labour supply is given by the upward-sloping curve (L_S) that cost of labour (AC_L). AC_L gives the average wage rate that would need to exist in of labour input and is in this sense directly comparable to the industry's labour s increase employment it can only do so by offering a higher wage and enticing wo this is the essence of the upward-sloping Ls curve. However, it must pay a higher hires an additional worker. Therefore, the marginal cost of labour is not only the worker at a higher wage, but paying *all* existing workers a slightly higher wage to curve is above the AC_L curve.

Notice that the firm's [illegible] demand curve hasn't changed from that of the situat market [illegible] determined by the marginal revenue product of labour

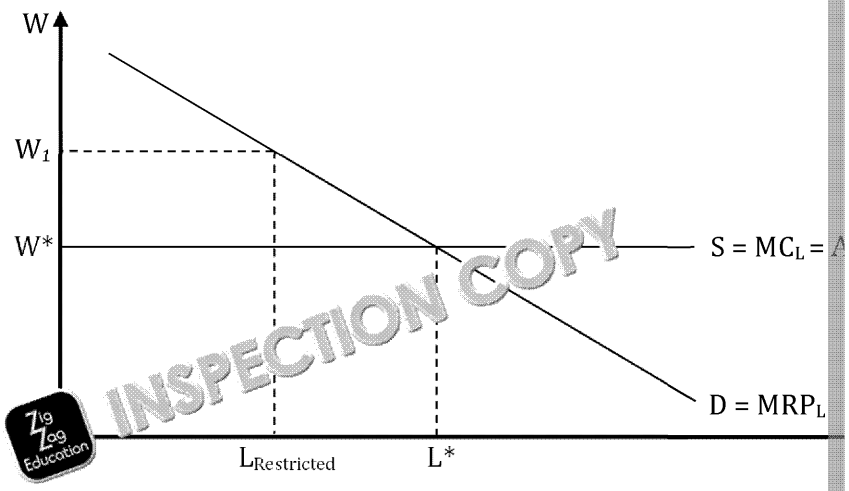
If the monopsonist is a profit-maximising firm it will employ labour up to the poi (MC_L) equals the marginal revenue product of labour (MRP_L) – this would be L_M. not pay a wage consistent with the MC_L=MRP_L point. It only need to pay a wage o with the labour supply curve. Therefore, monopsony power implies that there wi supplied and at a lower wage than in a perfectly competitive labour market – tha

[Maximum 6 marks. 5–6 marks for accurately explaining with a correctly labelled on an industry's labour market; 3–4 marks for an adequate explanation however o 1–2 marks for a limited explanation that may be unfocused or incorrect.]

2.
- Monopsonies might be *demotivating* for the labour force because they feel t monopsonists offer wages lower than would prevail in a perfectly competiti might become less productive as a lack of motivation might mean that they
- Monopsonist employers might not invest in improving working conditions to compete with labour for.
- Monopsonies can increase wage inequality in society because they have th a perfectly competitive labour market

[2 marks each for a [illegible] explanation of a disadvantage of monopsony power; 1 ma less clear [illegible] conveys the general meaning]

3. (a)



[Maximum 4 marks for a clearly labelled diagram, correctly illustrating the ef labour supply on the individual firm; 2 marks for an adequate illustration, hov lacking in detail]

(b) Advantages:

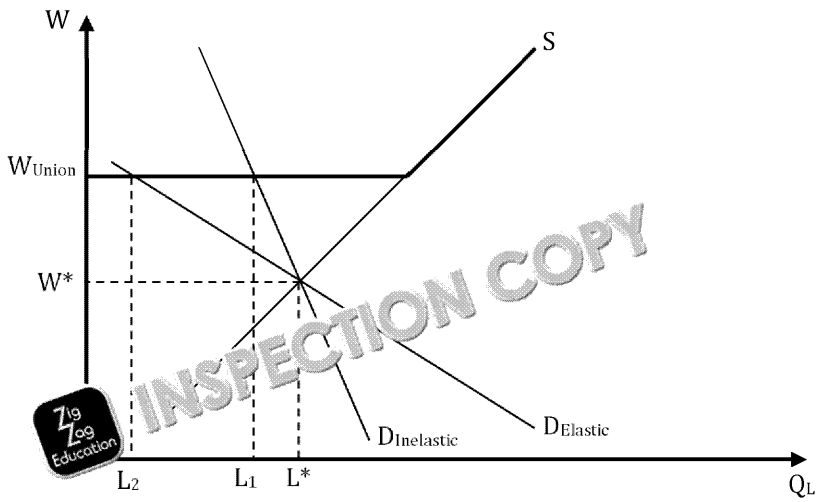
- If the union restricts the supply of labour to a level *below* what the indi prevailing market wage W*, the firm can artificially push the wage up t employed by the firm. Note that it is important that the firm can emplo the union for this action to have an effect.
- It is also possible that wage rate of W_1 might increase workers' motivat more productive. Union intervention could then be thought of as benef

Disadvantages:

- It is the case that the union will have more power to restrict labour sup *must* employ unionised workers – e.g. a 'closed shop'. However, if the fi registered union members, the union's actions might only serve to disa restricting them from employment opportunities.
- Unions restricting the labour supply necessarily prevents people from policy is criticised to union members that are still employed, whil work at the wage of W* are forcibly unemployed. If the demand for labo inequality between the employed union members and those that are u unemployment imposes obvious costs on society.
- If the labour market is perfectly competitive there is little need for uni inefficient for the wage rate to be artificially raised above the market-c

[Maximum 4 marks for accurately assessing one clear advantage and one clear d restricting the labour supply; 2 marks for an adequate assessment, however it is

4.



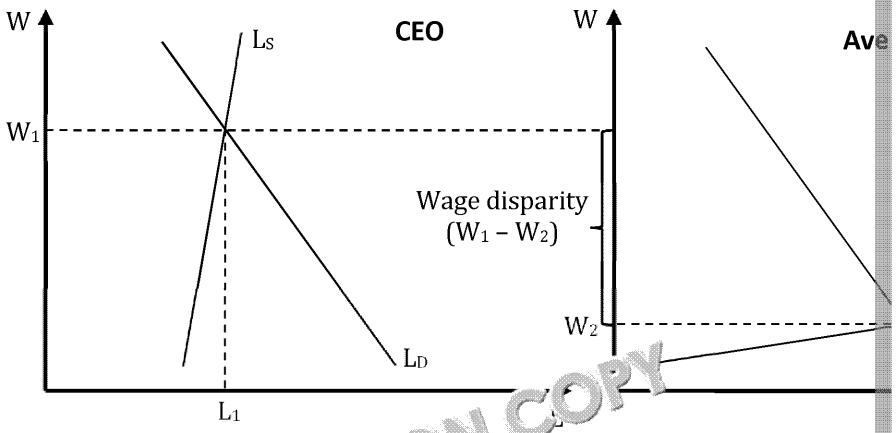
Before the trade union negotiated a fixed wage, the labour market was in equilib demand and supply, where the market-clearing wage rate was W* and the quant

Once trade union negotiates a *fixed* wage for union members, say, W_{Union}, the effe
situation in which there is a fixed minimum wage imposed by a government. Effe
constrained at W_{Union} until it meets the industry's upward-sloping labour supply
for any wage below W_{Union} and, as such, this will affect the quantity of labour em
effect, there is a trade-off between a higher wage and employment.

Yet, this trade-off is more pronounced according to the elasticity of a firm's labou
say, because capital is unsubstitutable for labour, the effect of increasing the wag
unemployment. Equilibrium is achieved at W_{Un} and L_1 where L_1 is only margin
competition equilibrium of L*. However, when the demand for labour is elastic, t
more drastic effects on unemployment is reduced to just L_2 at the u
fixed wage increases unemployment, but the effect is far more pronounced and i
is elastic.

[Maxim *arks for accurately illustrating and explaining the effects of the elas*
wage negotiated by a trade union; 1–2 marks for an adequate explanation, howeve
be underdeveloped or lacking in detail]

5.



Disparities in wage r occupations exist primarily because of differe
supply. CE w acquired very particular skills and expertise in operatin
more i supply than workers of low-skilled jobs. CEOs are usually highly e
might h innate ability in business – this could be true of someone like Don
or any other executive chair of a multinational business. CEO wages therefore ca
higher levels of human capital, and this is reflected in the inelasticity of the labou

In the CEO section of the diagram above, the labour supply of CEOs is shown to b
the rarity of a CEO skill-set. In the 'Average' section of the diagram above, we ca
typical McDonald's worker is highly elastic – this is because the typical worker is
wide-range of people that would be suitable for such a role. Naturally, then, the i
labour demand in these two diagrams will bring about differences in the wage ra
are differences in their wages whereby the CEO earns a wage of W_1 and the 'typi

However, CEOs can also be thought of as bringing in higher marginal revenues th
there is also a demand-side effect that is occurring. CEOs introduce particular str
millions upon millions of profit. Typical workers simply u ertake the operation
strategy. CEOs, therefore, are subject to far stronge d an than the average w
by labour-saving technology. Hence, CEOs c om nd higher wages because t
revenue for a business and this ha e on the 'derived' demand for their lab

[Maximum 6 marks. 5 marks for accurately assessing the reasons by which a CE
of an av w answer should be applied accurately to the question, using s
3–4 ma providing an adequate analysis, might be underdeveloped or lacking
poor an s, which may be unfocused or incorrect.]