OCR
RECOGNISING ACHIEVEMENT

GCE

Economics

Advanced GCE

Unit **F584:** Transport Economics

Mark Scheme for January 2013

Oxford Cambridge and RSA Examinations

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

Annotations

Annotation	Meaning
	Unclear
	Benefit of doubt
	Cross
	Effective evaluation
	Irrelevant
	Level 1
	Level 2
	Level 3
	Level 4
	Not answered question
	Noted but no credit given
	Too vague
	Tick
	Judgement/Level 4(a) awarded

Subject-specific Marking Instructions

Some questions may have a 'Level of Response' mark scheme. Any details about these will be in the Additional Guidance. Some questions may have a 'Level of Response' mark scheme. Any details about these will be in the Additional Guidance.

The following guidelines are generic to each Level of Response mark scheme used for part (b) of the essays and should be applied consistently between the different essays:

Level 4(b): Complex ideas have been expressed clearly and fluently using a style of writing which is appropriate to the complex subject matter. Sentences and paragraphs, consistently relevant, have been well structured, using appropriate technical terminology. There may be few, if any, errors of spelling, punctuation and grammar.

Level 3: Relatively straightforward ideas have been expressed with some clarity and fluency. Arguments are generally relevant, though may stray from the point of the question. There will be some errors of spelling, punctuation and grammar, but these are unlikely to be intrusive or obscure meaning.

Level 2: Some simple ideas have been expressed in an appropriate context. There are likely to be some errors of spelling, punctuation and grammar of which some may be noticeable and intrusive.

Level 1: Some simple ideas have been expressed. There will be some errors of spelling, punctuation and grammar which will be noticeable and intrusive. Writing may also lack legibility.

Question			Answer	Marks	Guidance
1	(a)	(i)	One mark for a clear definition: "anything that provides for the operation of transport" OR "permanent installations needed for firms to provide transport services" **Alternatively, accept statements which recognise that infrastructure is anything which enables transport services to be provided.** DO NOT reward vague comments such as: "infrastructure is how transport modes operate" "those things which allow different modes of transport to travel" "objects allowing transport to run" "factors that allow transport to be possible"	1	DO NOT accept examples of infrastructure Only reward ONE clear statement.
		(ii)	One knowledge mark for any relevant advantage such as: • lower carbon emissions • bulk transit • avoiding road congestion • will be more efficient • will result in firms enjoying lower costs • faster journeys One mark for explaining this advantage: The explanation can take the form of EITHER explaining why the advantage arises OR developing the consequences of the advantage. For example: "Bulk transit occurs (1) because trains are able to carry larger numbers of containers which each contain larger amount of products (1)" "Bulk transit occurs (1) which allows firms to benefit from economies of scale (1) OR lower unit costs" (1) "lower costs (1) due to bulk transit lowering AC's (1)"	2	NOTE: This is a 1+1 question with one knowledge mark and one application mark One mark for the identification of a relevant advantage. One mark for and explanation of this advantage. **NOTE: if no relevant advantage is identified, then a mark of zero is awarded.**

Question			Answer	Marks	Guidance
	(b)	(i)	This question asks candidates to identify the problems with the forecasting process itself. DO NOT reward references to the resulting forecasts being estimates as this is not a problem of the process. BUT DO reward the idea that samples used in surveys may not be representative of the population as a whole. Two marks for identifying two specific problems such as: • Attaching monetary values to costs and benefits OR what shadow price to use?(DO NOT reward reference to "ignoring negative externalities") • What factors to include in any CBA or forecast • Uncertainty / unforeseen changes may occur • What discount rate should be used? • Survey samples may be unrepresentative / skewed. • The cost of research to establish forecasts. • The process is time consuming • Data issues: Estimated data such as GDP estimates / population data / fuel prices / commuting times / historic data used in forecasting may be wrong (DON'T accept references to "data/ forecasts are inaccurate "without specific reference to WHAT data) Explanation: This must develop the nature of the problem itself. Eg: • "it is difficult to establish monetary values for negative externalities (1), for example the damage done to habitats and wildlife (1)" • "it is difficult to establish monetary values for costs and benefits (1). This is because these are intangible and involve subjective opinions(1)" • "Future events are uncertain (1) such as possible oil price shocks (1) or world recession (1)" ***DO NOT** award second mark where the **consequences** of incorrect forecasting are explained – see right hand side.*	4	NOTE: This is a 2+2 question. For each problem, One mark is awarded for knowledge and One mark for explanation. For example: "One problem is uncertainty (1). When making forecasts we have to try to predict what will happen in the future which is incredibly difficult as there can be unforeseen events such as recession (1)". "Difficulties in attaching values to issues which have no market price (1), for example, the value of lost time (1)" **If no correct problems are identified then a mark of zero is awarded.** *For explanation mark, do not award this where the consequences of incorrect forecasting are developed.* For example: "Future GDP estimates could be wrong (1) hence leading to forecasts being wrong" (NO explanation mark). "It is difficult to place monetary values on negative externalities (1) which could lead to projects being undertaken which should not be" (NO explanation mark) "Forecasting is costly (1) and this leads to there being an opportunity cost issue" (NO explanation mark). Here they need to develop WHY it is costly (employing analysts and processing data over a long period of time). **IN BRIEF: DO NOT reward the second mark simply for stating "this means that the forecast will be wrong"**

Question			Answer	Marks	Guidance
		(ii)	One mark for identifying any relevant tax which will be affected including: • Excise duties (accept "duties" but NOT "fuel tax") • VAT • Air Passenger Duties. • Accept reduced V.E.D. (but NOT "road tax") as people may sell cars. One mark for an explanation as to why this is the case. For example, with people switching from car use / short haul planes there will be a reduction in the number of people using cars/planes and therefore a loss of tax revenue.	2	One mark for the identification of any relevant indirect tax which may be affected by HS2. One mark for explanation of why this tax is affected. For example: "HS2 will see a reduction in tax revenue from excise duties on fuel (1). This is because people will switch modes of transport from car to rail, hence buying less fuel and therefore paying less excise duty on fuel (1)".
	(c)		<u>One knowledge mark is available for any **one** of the following explicit statements</u>: • Consumers fail to pay the <u>full</u> <u>social</u> costs of their actions • Consumers ignore (OR do not pay) the external costs of their actions OR consumers ignore negative externalities • The price which consumers pay is too low compared to the social optimum price OR society would prefer the price charged to be higher OR the consumer does not pay the full price of the product. <u>Two marks are available for applying this knowledge</u>. Award **one mark** for each of the following statements: • An explicit statement that consumers overconsume the product (accept reference to overproduction) • Too many scarce resources will be allocated towards their production OR allocative inefficiency will occur OR resources are not allocated efficiently	3	NOTE: this is a 1+2 question For example: "Negative extemalities arise where individuals ignore the external costs of their actions (1). This results in market failure as there is overconsumption of the good (1) and hence allocative inefficiency (1)". There is NO MARK for defining a negative externality here.

Question			Answer	Marks	Guidance
	(d)	(i)	Accept any relevant policy such as subsidies, indirect taxes and deregulation / privatisation. **Award two marks for analysis of how the policy works:** Diagram analysis: shift of supply curve / MPC (1) & clearly labelled change in equilibrium price AND quantity (1) Written analysis that subsidies lead to: • lower prices/fares OR lower costs of production (1) • increased supply / production OR higher demand for public transport (1) OR lower demand for cars (1) Written analysis that indirect taxes lead to: • higher prices/fares OR higher costs of production (1) • lower supply /production OR lower demand for cars (1) OR higher demand for public transport (1) **Award two marks for relevant evaluation of the policy:** • inelastic PED for cars means tax less effective • inelastic PED for public transport means subsidies less effective • perceived poor quality of alternatives to cars means that there is seen to be no viable substitute / XED • Inferior goods: Negative YED: with rising incomes subsidising the price of public transport will be less effective • Firms may use subsidies to raise profits rather than increasing service provision / quality • Size of subsidy / tax will determine the effectiveness. • Taxes must be enforced / policed to be effective **Award one mark for clear judgement:** For example, "Overall this policy will be effective if….." OR "Overall this policy will not be effective because……"	5	This is a 2+2+1 question with two marks for analysis, two for evaluating the policy and a final mark for an explicit judgement / conclusion. NOTE: The final mark is to be awarded for explicit judgement on how effective the chosen policy is. For the first two analysis marks, reward diagrams (even if not explained) for analysis marks. NOTE: ANY DIAGRAM CAN ONLY GAIN ANALYSIS MARKS IF PERFECTLY ACCURATE For second analysis mark, there must be explicit reference to the impact of the policy on supply or demand. Award two marks for two separate evaluative statements **OR** for one evaluative point which is well developed. **A response lacking any analysis of HOW the policy works will immediately gain a mark of zero for this question** **NOTE: as question asks for the effectiveness of this policy in achieving modal switch any criticism MUST explain why modal switch may not occur.** Therefore, DO NOT reward reference to the fact that the subsidy might be costly OR that indirect taxes are regressive.

Question			Answer	Marks	Guidance
		(ii)	**Three marks for analysis of CBA:** • CBA compares / measures costs & benefits **OR** advantages and disadvantages **OR** arrives at a benefit : cost ratio • CBA attaches monetary values to costs/benefits OR uses 'shadow prices' • CBA forecasts future costs/benefits OR discounts future costs/benefits • CBA will attach probabilities to uncertainties • *Projects go ahead only where benefit >cost OR there is a net benefit OR where NPV OR NSB is positive OR do not proceed if cost > benefit* • *Selecting projects with positive NPV etc ensures an efficient allocation of resources* **Three marks are available for relevant evaluation**: • Hard attaching monetary values to costs/ benefits • 'Shadow prices' may be inaccurate • CBA is time consuming and expensive • What factors should be included? This implies value judgements and subjectivity • Local campaigning can pressure decision makers to make to make the wrong decision. • What 'weights' should be attached to costs/benefits? • What discount rate should be used? • Human error in collection of data OR inaccurate data used (eg out of date) • If CBA makes wrong policy choice then inefficient /misallocation of scarce resources & welfare loss. **Two marks are available for a clear judgement:** 1 mark for a simple statement, such as *"Overall, CBA is not totally effective" OR "CBA is effective"* 2 marks for clearly developed judgement, such as *"Overall, CBA is effective but depends upon accuracy of data used"*	8	This is a 3+3+2 question. Three marks for analysing how CBA works, three marks for analysing the limitations and two marks for a judgement of the effectiveness of CBA. NOTE: this is a question on CBA rather than COBA. Therefore DO NOT reward the criticism that negative externalities are ignored. ***FOR THIRD ANALYSIS MARK, MUST INCLUDE ONE OF THE FINAL TWO BULLET POINTS UNDERLINED*** Award three marks for three separate evaluative statements OR for one evaluative point which is very well developed. As the question asks specifically about the effectiveness of CBA in determining the allocation of resources, DO NOT reward simple statements such as "CBA is ineffective as the data is only estimated" is too vague. Likewise, DO NOT reward "some effects are unforeseen" OR "some data will be inaccurate" **A response lacking any analysis of HOW CBA works will immediately gain a mark of zero for this question**

Question			Answer	Marks	Guidance	
					Content	**Levels of response**
2	**(a)**		Candidates should analyse the different economies of scale in transport markets. If there is no relevant application made to transport markets then award a mark at the bottom of the relevant level (eg 5 marks OR 9 marks). An answer with no transport application can therefore gain 9 marks max. **Relevant economies of scale include:** • Technical • Purchasing/commercial • Managerial • Financial • Risk bearing (or economies of scope) • Marketing • Selling • Improved infrastructure • The development of 'cluster' firms (around an airport, for example) • Firms colluding in an industry to fund R&D **Relevant analysis of these include:** Purchasing EOS (L1) arise with airlines buying fuel in greater bulk (basic L2). This results in lower Average Costs (basic L3) as firms are able to gain discounts and hence the cost of buying each successive unit of fuel diminishes despite total cost rising (good L3)	15	**Level 1** = identification of types of economies of scale **Level 2** = identification AND explanation of economies of scale **Level 3** = analysis of HOW each economy of scale results in lower average costs OR lower costs per unit The key difference here is between L2 and L3. To gain analysis marks, candidates must analyse why the example given results in lower Average Costs . **An answer simply listing types of EOS can gain up to 4 marks max. (Level 1).** Simple reference to "*For example, purchasing / financial EOS (1) lead to lower AC"* IS NOT ANALYSIS until there is some explanation of why average costs fall.	**Level 3: (9–15 marks)** Analysis of HOW each named economy of scale results in lower AC's. *If there is no reference to falling LONG RUN average costs (either on a diagram or in writing) then mark at the lower end of each band within the level (eg 13-14 / 11 /9 marks).* 13–15 marks: *Very good analysis:* Good analysis of two or more economies of scale in the context of a transport market 11–12 marks: *Good analysis*: Good analysis of one economy of scale OR basic analysis of two in transport context 9–10 marks: *Basic analysis:* Basic analysis of one economy of scale. **Level 2: (5–8 marks)** For an application of knowledge and understanding of different econs of scale: 7–8 marks: 2 or more economies of scale identified and explained in the context of a transport market.

Question			Answer	Marks	Guidance	
					Content	Levels of response
			Technical EOS arise (L1) as when firms expand they take advantage of larger capacity planes / trains (L2). With larger planes / trains, firms will benefit from lower average costs (basic Level 3). This is because capacity may double but total costs of running planes rise more slowly. Hence reducing average costs (good L3). Managerial EOS occur (L1) with airlines / train companies now able to employ specialist managers, for example HR and accountants (L2). Such specialists will allow the firms to benefit from lower AC's (basic Level 3). Specialists should be more productive ….. increasing output and lowering AC's (good L3). Improved infrastructure provision is an external EOS (L1). For example, the growth of transport firms may well result in local authorities building new and improved roads nearby (L2) which enables firms to enjoy lower AC's (basic L3). This is because improved infrastructure cuts the cost of delivering catering / fuel to airports, therefore lowering AC's (good L3) in the long run.			5–6 marks: One transport economy of scale identified and explained in the context of a transport market = 6 marks One or more economies of scale identified and explained but NOT in a transport context = 5 marks **Level 1: (1-4 marks)** Knowledge & understanding of economies of scale: 3–4 marks: identification of two or more economies of scale not applied to transport markets 1–2 marks: identification of one economy of scale not applied in transport markets OR a general definition of EOS

Question			Answer	Marks	Guidance	
					Content	**Levels of response**
	(b)		To gain L4, two sided analysis is needed of benefits AND costs of deregulation. **Deregulation has succeeded**: A. <u>Reduced barriers to entry</u> (L2) increases competition <u>as it is easier for firms to enter the market</u> OR more firms enter the market (basic L3) OR more <u>choice</u> for consumers (basic L3). <u>B. Increased competition</u> (L2) Relevant analysis includes: • Explained theory of the firm diagrams showing the move from monopoly to competitive markets (L3) • Basic S&D analysing increased competition via <u>increased</u> supply and lower equilibrium price (L3) • Written analysis in terms of increased market supply lowering equilibrium prices (basic L3) • Analysis of lower prices increasing consumer surplus (L3) OR leading to modal switch <u>and reduced pollution / congestion / external costs</u> (basic L3) <u>C. Increased efficiency</u> (L2): • Productive efficiency (L2) / reduced 'X inefficiency' (L2) as firms produce at minimum AC (basic L3). Competing firms need to minimise costs in order to lower prices – hence incentive to lower AC's (L3). Such gains have been realised with the introduction of 'Hopper' style buses	20	**Level 4(a): Possible judgement includes:** • The impact of varies from one <u>part</u> of the country to another OR from SR to LR. • The impact varies from one <u>industry</u> to another. Arguably deregulation has been more successful in the airline industry than with buses. • The impact depends upon how active the government is in regulating the industry concerned. • Other barriers exist (not just legal ones) and hence transport markets are still not contestable even though it may have successfully removed some. The key difference here is between <u>identifying</u> and <u>analysing</u> benefits and / or costs. For example: Simple explanation / description of which barriers have been lowered gains only L2 as there is no analysis of the consequences eg *"The legal requirement to prove that there is a "need" for bus services has been removed and bus operators only need to register with Transport Commissioners in order to run a service"* (L2).	**Level 4(a): (16–20 marks)** For two sided analysis AND judgement of how successful deregulation has been *NOTE: to reach L4(a) balanced discussion must already be present.* 18–20 marks: balanced discussion with good judgement 16–17 marks: balanced discussion with weak judgement **Level 4(b): (11–15 marks)** For two sided discussion lacking judgement. 13–15 marks: balanced discussion 11–12 marks: basic discussion (where there is only basic analysis of one side of the argument). **Level 3: (5–10 marks)** One sided analysis ie analysis of why deregulation has OR has not been successful. 8–10 marks *Good analysis*: relevant analysis applied explicitly to the air or bus industries. 5–7 marks *Basic analysis*: relevant analysis of deregulation theory not

Question			Answer	Marks	Guidance	
					Content	Levels of response
			• Dynamic efficiency gains (in LR) (L2) – firms invest more in R & D and create new, innovative products (L3) • Allocative efficiency (L2) as, in theory, firms produce where P=MC (basic L3). Firms now have a clear incentive to produce goods and services which consumers demand, or risk losing market share (L3). **Deregulation has not been successful** • Duplication of services on existing profitable routes (L2) wasting scarce resources (L3) OR allocative inefficiency (basic L3). • Non profitable routes cut (L2) despite being socially desirable – allocative inefficiency (basic L3) • Negative externalities with more firms providing services (L2). Explicit recognition that his creates a negative impact upon 3rd parties (L3) OR leads to over-consumption/ production (L3) OR allocative inefficiency (L3) • Oligopoly or monopoly often results (L2). Accept relevant analysis of inefficiency / higher prices in these market structures (L3) OR the lack of incentive to keep costs/price down due to lack of competition (L3)		BUT award L3 for basic analysis eg "Deregulation has led to lower air fares (L2) with the resulting gain to consumers illustrated through increased consumer surplus" (L3) <u>In terms of drawbacks</u>: Higher prices (L2) but only gains analysis marks when analysed in terms of WHY these occur (in other words, with reference to monopoly / oligopoly / supply and demand theory) **OR** the consequences of higher prices (in terms of reduced consumer surplus). Accept increased negative externalities as a possible drawback due to increased service provision BUT only award analysis marks where overconsumption OR allocative inefficiency is developed. NOTE: reference to London as an example is NOT relevant as buses were not deregulated here.	specifically applied to a transport market OR very basic analysis in context. **Level 2: (3–4 marks)** For an application of knowledge and understanding of deregulation in the bus or air industry. Answers in this level will simply describe changes in the bus or air industry. In other words, applying knowledge of changes in the bus industry. **Level 1: (1–2 marks)** For knowledge and understanding of what contestability is. Answers in this level will simply state what deregulation or contestability are.

Question			Answer	Marks	Guidance	
					Content	Levels of response
			• Anti-competitive behaviour (such as predatory pricing) by existing firms (L2) who sell below cost in SR (L2), drive new firms out of market (basic L3) OR stops new firms entering (basic L3) and limit competition (L3). • Loss of supernormal profit (L2)…less R&D spending (L2) leading to loss of dynamic efficiency (L3) • Possible loss of economies of scale (L2) leading to higher prices (basic L3) due to firms incurring higher AC's (L3).			

Question			Answer	Marks	Guidance	
					Content	**Levels of response**
3	**(a)**		By definition, a contestable market is one where barriers to entry are free and costless. An increase in contestability means that there is greater chance of new firms entering the market and influencing behaviour of existing firms. **Relevant factors which may explain a rise in contestability include:** • A reduction in barriers to entry (L1) • A reduction in barriers to exit (L1) OR a fall in sunk costs (L1) • Legislation /regulation (L1) (Accept answers which analyse two different barriers to entry as providing two discreet points of analysis). **Relevant analysis of these include:** Lower barriers to entry (L1) such as lower legal barriers such as licensing (L2) <u>will mean that it is easier for new firms to enter the market</u> and hence the market is more contestable (basic level 3). This is because new firms will no longer be barred by legal requirements which may hinder firms from entering the market and therefore stop firms being able to enter the market (L3).	15	**Level 1** = Identification possible factors **Level 2** = Identification AND explanation of factors **Level 3** = Analysis of HOW each factor leads to increased contestability The key distinction between Level 2 and Level 3 is whether or not explanation becomes analysis. A Level 2 answer describes factors which lead to a rise in contestability whilst a Level 3 answer clearly <u>analyses</u> how each factor increases contestability. <u>Basic analysis</u> will state that the identified factor will make it easier for firms to enter the market, hence making the market more contestable. <u>Good analysis</u> will develop this further by explaining WHY firms will be more able to enter the market. *If there is no application to transport then mark at the lower end of each level*	**Level 3: (9–15 marks)** Analysis of HOW factor results in a rise in contestability. 13–15 marks: *Very good analysis:* Good analysis of two or more factors in a transport context. 11–12 marks: *Good analysis*: Good analysis of one factor OR basic analysis of two in a transport context. 9–10 marks: *Basic analysis:* Basic analysis of one factor OR clear analysis of factors NOT applied in a transport context. **Level 2: (5–8 marks)** For an application of knowledge and understanding of different factors: 7–8 marks *Good application*: 2 or more factors identified and <u>explained in a transport context</u> 5–6 marks *Basic application*: 1 factor identified & explained in a transport context OR several factors identified and explained but NOT in transport context

Question			Answer	Marks	Guidance	
					Content	Levels of response
			Reduction of barriers to exit / sunk costs (L1) such as the cost of buying trains / planes (L2). With the move towards leasing of planes and trains, firms will find it easier to enter markets as they will not incur losses from selling assets on leaving the market (basic L3). This will encourage firms to enter the market as there will be a lower financial penalty involved (simply ending the lease) if they were to exit the market (good L3). Laws which prohibit limit pricing (L1) for example, incumbent bus companies using their economies of scale to lower fares knowing that new firms could not possibly afford such low fares (L2). If this occurs then potential entrants will be able to enter the market much more freely (basic level 3) because they will be able to compete freely against existing suppliers who will no longer be able to undercut them using their market power and economies of scale to do this. (Good L3).			**Level 1: (1–4 marks)** Knowledge & understanding of what a contestable market is. 3–4 marks: identification of two or more characteristics of a contestable market not applied to transport. 1–2 marks: identification of one characteristic not applied in transport markets OR a general definition of contestability.

Question			Answer	Marks	Guidance	
					Content	**Levels of response**
	(b)		Candidates need to analyse the benefits & costs of a rise in contestability. **Possible benefits include:** • Monopolists may well lower price in order to avoid making supernormal profits which could attract new firms in to the market (L2). This increases consumer surplus (L3) • Accept diagram analysis showing firm producing at AC=AR in order to make only normal profits (L3) • Firms are allocatively efficient (L2) as they want to provide products which consumers demand in order to survive in competitive markets (L3). Firms are productively efficient (L2) as they want to lower costs (L2) <u>to lower prices</u> (L3). • Analysis of increased supply (L2) leading to lower prices (basic L3). Accept diagram showing increased supply/lower prices (L3) • In theory, fares should be lower as firms will feel threatened by the entry of new firms in to the market (L2) - consumer surplus rises (L3). • Dynamic efficiency OR greater R&D OR innovation (L2) firms wish to stay ahead of rivals and retain market share (L3) OR this lowers AC's (L3) • Lower prices (L2) leads to modal switch towards public transport, reducing negative externalities (L3)	20	**Level 4(a): Possible judgement includes:** • The impact depends upon exactly how substantial the rise in contestability is • The impact depends upon how long the market remains contestable for • What matters is not the actual ease of entry in to the market but the <u>perception</u> of whether new firms will be able to enter the market or not. • It depends upon WHO we are interested in looking at the impact upon ie which group in society.	**Level 4(a): (16-20 marks)** For two sided analysis AND judgement of whether or not a rise in contestability is beneficial. 18–20 marks: balanced discussion with good judgement 16–17 marks: balanced discussion with weak judgement *NOTE: In order to reach L4(a) 'balanced discussion must already be present.* **Level 4(b): (11–15 marks)** For two sided discussion lacking judge-ment. 13–15 marks: balanced discussion 11–12 marks: basic discussion where there is only basic analysis of one side of the argument. **Level 3: (5–10 marks)** One sided analysis ie analysis of whether increased contestability is OR is not beneficial. 8–10 marks Good analysis: relevant analysis applied explicitly within a transport context

Question			Answer	Marks	Guidance	
					Content	Levels of response
			Possible drawbacks include: • Contestable markets will not make supernormal profits and will not be able to invest in R&D (L2). Therefore, firms will not enjoy dynamic efficiency gains (L3) OR lower quality product/service (L3) • If firms fear that expansion (and supernormal profits) will attract 'hit and run' firms then they may not expand and lose benefits of econs of scale (L2) – productive inefficiency (L3) • Increased contestability can lead to increased levels of competition and hence loss of economies of scale (L2) / natural monopoly (L2) / higher AC's (L2) and consumers face higher prices (L3). • Possible cost cutting / Health and Safety risks in highly competitive markets (L2) impacting upon 3rd parties (L3) • Negative externalities with more firms providing services (L2). Explicit recognition that his creates a negative impact upon 3rd parties (L3) OR leads to overconsumption / production (L3) OR allocative inefficiency (L3)		**MUST HAVE EXPLICIT STATEMENTS THAT CONTESTABILITY IS BAD**	5–7 marks Basic analysis: relevant analysis of contestability not specifically applied to transport OR very basic analysis in a transport context. **Level 2: (3–4 marks)** For an application of knowledge and understanding of what increased contestability means. Answers in this level will simply describe the characteristics of a contestable market. **Level 1: (1–2 marks)** For knowledge and understanding of what contestability is. Answers in this level will simply state what is meant by OR define contestability.

Question			Answer	Marks	Guidance	
					Content	Levels of response
4	(a)		**Accept relevant factors such as:** • Lower car prices and/or lower running costs in real terms • Increased incomes/prosperity/GDP • Increased price of substitute goods OR reduced quality of substitutes • Reduced price of complements • Shifts in tastes and fashions away from buses to cars • Population growth • Increased employment (accept as different to income/GDP) • Growth of UK road network (accept simple analysis of this in terms of ↑ supply ↓ price). NOTE: Answers not referring at all to <u>car use</u> gain a maximum of 9 marks only. **Relevant analysis of these:** *NOTE: DO NOT reward analysis of <u>why</u> higher price / higher income /increased population has occurred. Only reward analysis of car use has increased.* Lower prices (L1) result in more consumers being able to afford cheaper cars (L2). This can be illustrated by a demand curve with lower price leading to an extension of demand for cars (basic L3). At the lower price, more people switch to cars away from relatively more expensive public transport (good L3).	15	**Level 1** = Identification of possible factors **Level 2** = Identification AND explanation of factors **Level 3** = Analysis of HOW each factor results in a rise in car use A Level 2 answer will simply describe factors which may have caused a rise in car use whilst a Level 3 answer will clearly analyse how each factor has caused use of cars to rise using economic theory. *One obvious way of analysing these factors is by using a relevant demand diagram BUT the factor must be clearly identified (eg <u>higher</u> incomes OR an <u>improvement</u> in tastes and fashion) BUT <u>S&D can only gain basic L3</u>*	**Level 3: (9–15 marks)** Analysis of HOW factor results in a rise in car use. 13–15 marks: Very good analysis: good analysis of two or more factors 11–12 marks: Good analysis: Good analysis of one factor OR basic analysis of two. 9–10 marks: Basic analysis: Basic analysis of one factor 9 marks: an analytical answer containing no reference at all to car use. **Level 2: (5–8 marks)** For an application of knowledge and under-standing of different factors: 7–8 marks Good application: 2 or more factors identified and explained with reference to car use 5–6 marks Basic application: 1 factor identified and explained with reference to car use. 5 marks: Application but lacking any relevant application to car use.

Question			Answer	Marks	Guidance	
					Content	Levels of response
			Increased incomes (L1) have occurred over the past decade meaning that people are more able to afford cars (L2 only). This can be illustrated by a rightwards shift of the demand curve (basic L3) OR given that cars are 'normal' goods (basic L3) and therefore have positive income elasticity of demand, a rise in income will lead to higher demand for the product (good L3). Increased price of substitute goods (L1). Bus prices have risen is real terms (L2) leading to people switching/changing to car use (basic L3) as it is a cheaper alternative OR a diagram showing a right-wards shift of the demand curve for cars (basic L3). Explanation of this in terms of POSITIVE cross elasticity of demand for cars with respect to the price of buses (good L3). Increased population (L1) means that there will be more people undertaking transport journeys (L2 only). This shifts the demand curve to the right (basic L3) OR the <u>derived demand</u> for transport rises and there is greater demand for cars (basic L3). The <u>derived demand</u> for car use rises as more people need to travel to work or use their cars for more leisure journeys, hence the demand will be higher (good L3).		For analysis of population as a factor, there must be explicit reference to derived demand. DO NOT accept convenience unless there is specific reference to <u>increased</u> convenience as a consequence of improving the road network	**Level 1: (1–4 marks)** Knowledge & understanding in terms of simple reference to factors which may shift the demand curve. 3-4 marks: Good knowledge: two or more determinants of demand are identified. There is some reference to car use in the answer. 1-2 marks: Basic knowledge: one determinant of demand is identified OR there is a basic knowledge of what 'demand' refers to.

Question			Answer	Marks	Guidance	
					Content	**Levels of response**
	(b)		Candidates will expected to produce two sided analysis of how effective road pricing is <u>in reducing car use</u>. **<u>Three ways of analysing ERP include:</u>** **A. <u>Diagram analysis of ERP</u>:** <u>*'Basic analysis'*</u>: A clearly labelled diagram with an explanation of two of the following points. <u>*'Good analysis'*</u>: Clearly labelled diagram with an explanation of all three points: • supply curve shifts OR higher private costs OR external costs now taken into account / internalised OR now pay the full social cost • higher equilibrium price • lower quantity OR demand **B. <u>Written analysis of ERP</u>:** <u>*'Basic analysis'*</u> must cover two of the following three points. <u>*'Good analysis'*</u> must cover all three points: • road pricing increases the <u>private cost</u> of driving OR forces drivers to <u>internalise their external costs</u> OR price now reflects full social cost • This will shift the supply curve left • This leads to higher market price AND lower quantity demanded.	20	NOTE: It is very important that answers focus on the question – <u>namely, analysing how effective it is in reducing car use</u> rather than simply analysing the general policy. **Possible judgement includes:** • The effectiveness of road pricing is entirely dependent upon whether or not an alternative exists in the form of quality public transport. If this does not exist then however accurate the level of road pricing is, it will not be effective. • The impact of ERP depends upon the level at which it is set – too low and very few people will switch from their cars • If the revenues from road pricing were hypothecated into better quality public transport then there would be an alternative available and arguably PED for car use would be more elastic. • It will be more effective if used in conjunction with other policies	**Level 4(a): (16-20 marks)** For a discussion which includes judgement. 18–20 marks: balanced discussion with good judgement. 16–17 marks: balanced discussion with weak judgement. *NOTE: to reach L4(a), balanced discussion must already be present* **Level 4(b): (11-15 marks)** For two sided discussion lacking judge-ment. 13–15 marks *Good analysis*: balanced discussion (this must include clear analysis of whether or not road pricing lowers demand) 11–12 marks: basic discussion where there is only basic analysis of one side of the argument. **Level 3: (5-10 marks)** One sided analysis ie analysis of whether a national road pricing system would be effective in reducing demand. 8–10 marks: clear analysis of how road

Question			Answer	Marks	Guidance	
					Content	**Levels of response**
			C. Written analysis of hypothecation: Revenue raised from ERP can be used to fund improvements in public transport: • lowering fares, encouraging a shift from car to bus (basic L3) **OR** • improving quality of services, encourages shift from car to bus (basic L3) If BOTH factors considered, good L3. **Possible analysis of drawbacks:** • Road pricing must be set accurately equal to external costs • Level of charge: if too low it will have minimal impact on demand (especially on high income groups) • Possible displacement on to smaller roads which are not covered by road pricing (eg 'B' roads). Unless road pricing is totally comprehensive car journeys will therefore not be reduced but simply moved elsewhere. • Inelastic demand for car use: with inelastic PED (eg commuters) and therefore road pricing will have very little impact on their demand. • Inelastic YED of alternatives such as buses means that as household incomes rise, people will switch away from public transport. There-fore road pricing will not result in overall levels of car usage falling (unless set at very high levels?). • Hypothecation may involve a time lag (L2) and a delay before any reduction in car use occurs (L3)		Answers must focus upon the question set – namely, analysing how effective ERP is at reducing car use. **Therefore DO NOT accept criticisms of ERP in terms of:** • the cost of setting up ERP • political problems • the inflationary impact of ERP / reduced international competitiveness • possible civil liberties issues. • The regressive nature of charges **Level 2 answers:** Will contain simple application of knowledge, such as: "ERP raises the price of driving and lowers demand". OR refer to successful examples of ERP **Level 1 answers:** Contain knowledge of what ERP is OR exactly what effect such a scheme will have	pricing may reduce demand. 5–7 marks: basic analysis of how road pricing may not reduce demand. OR analysis of road pricing only without reference to car demand. **Level 2: (3–4 marks)** Answers in this level will simply provide examples of where road pricing has been used. **Level 1: (1–2 marks)** Answers in this level will simply state what is meant by road pricing.

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

Education and Learning
Telephone: 01223 553998
Facsimile: 01223 552627
Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations
is a Company Limited by Guarantee
Registered in England
Registered Office; 1 Hills Road, Cambridge, CB1 2EU
Registered Company Number: 3484466
OCR is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553