

A-LEVEL Economics

ECON3 Business Economics and the Distribution of Income Mark scheme

2140 June 2016

Version 1.0: Final Mark Scheme

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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ECON3

June 2016

Advanced Level Economics Unit 3

General Instructions

Marks awarded to students should be in accordance with the following mark scheme and examiners should be prepared to use the full range of marks available. The mark scheme for most questions is flexible, permitting the candidate to score full marks in a variety of ways. Where the candidate's response to a question is such that the mark scheme permits full marks to be awarded, full marks **MUST** be given. A perfect answer is not necessarily required for full marks. But conversely, if the candidate's answer does not deserve credit, then no marks should be given.

Occasionally, a candidate may respond to a question in a reasonable way, but the answer may not have been anticipated when the mark scheme was devised. In this situation, **OR WHENEVER YOU HAVE ANY DOUBT ABOUT THE INTERPRETATION OF THE MARK SCHEME**, you must in the first instance telephone your team leader to discuss how to proceed.

Two approaches have been used in the construction of the mark scheme.

(i) An issue based approach. The mark scheme for parts 01, 02, 04 and 05 of the data response questions and the first part of each essay question adopts this approach. The mark scheme lists the marks that can be awarded for particular issues (and associated development) that the candidate might include in the answer.

A levels approach. This approach is used for parts 03 and 06 of the data response questions and the second part of each essay question. The Levels Mark Scheme on the next page identifies five levels representing differences in the quality of work. A range of marks is allocated to each level. First decide the level into which an answer falls. The level chosen should be the one which best fits the answer provided by the candidate. It is not intended that the answer should satisfy every statement in the level description. Then think in terms of awarding the mid-point mark which has been identified for that level (eg 13 marks for Level 3). Move up or down from this notional mark by considering the extent to which the answer meets the level description overall. Strength in one skill can outweigh weakness in another. When using the Levels Mark Scheme the marker must identify where a particular skill is being demonstrated. The key to be used to identify the skill is given after the level descriptions. The question-specific mark scheme summarises the information which could be used to answer the question, but without attaching marks to particular issues.

AQA ADVANCED LEVEL (A2) ECONOMICS LEVELS OF RESPONSE MARK SCHEME

FOR USE WITH QUESTIONS 03, 06, 08, 10 AND 12 ONLY

A2 LEVELS OF RESPONSE	AO1 KNOWLEDGE and UNDERSTANDING of theories, concepts and terminology	AO2 APPLICATION of theories, concepts and terminology	AO3 ANALYSIS of economic problems and issues	AO4 EVALUATION of economic arguments and evidence, making supportive judgements
Level 5 22-25 marks (mid-point 24) Good analysis and good evaluation	Good throughout the answer with few errors and weaknesses	Good application to issues Where appropriate, good use of data to support answer	Relevant and precise with a clear and logical chain of reasoning Good awareness of the inter-relatedness of economic issues	Good with a clear final judgement
Level 4 17-21 marks (mid-point 19) Good analysis <u>but</u> limited evaluation OR	Good throughout the answer with few errors and weaknesses	Good application to issues Where appropriate, good use of data to support answer	Relevant and precise with a clear and logical chain of reasoning Good awareness of the inter-relatedness of economic issues	Limited but showing some appreciation of alternative points of view
Reasonable analysis <u>and</u> reasonable evaluation	Good throughout much of the answer with few errors and weaknesses	Some good application to issues Where appropriate, some good use of data to support answer	Largely relevant and well organised with reasonable logic and coherence Some awareness of the inter-relatedness of economic issues	Reasonable, showing an appreciation of alternative points of view
Level 3 10-16 marks (mid-point 13) Reasonable answer, including some correct analysis but very limited evaluation	Satisfactory but some weaknesses shown	Reasonable application to issues Where appropriate, reasonable use of data to support answer	Reasonably clear but may not be fully developed and is perhaps confused in places with a few errors present Quite well organised with some logical development	Superficial, perhaps with some attempt to consider both sides of the issue(s)
Level 2 4-9 marks (mid-point 7) Weak with some understanding	Limited and some errors are made	Partial application to issues with some errors Where appropriate, limited use of data to support answer	Partial but confused at times, lacking focus and development Limited logic and coherence	A very basic and simplistic attempt is made which is unsupported by analysis
Level 1 0-3 marks (mid-point 2) Very weak	Weak with a number of errors	Little, if any, application to issues Where appropriate, no use of data to support answer	Poor and lacking clarity and focus	No relevant evaluation

THE KEY TO BE USED WHEN USING THE LEVELS MARK SCHEME

- **D** Where a particular economic term is correctly **DEFINED** in order to help the candidate to answer the question properly.
- I Where a relevant **ISSUE** is raised by the candidate.
- **K** Where the candidate demonstrates **KNOWLEDGE** of recent developments or features of the economy which help enhance the candidate's response to the question. This should also be used where the candidate quotes relevant examples.
- Ap Where the candidate demonstrates the ability to APPLY knowledge and CRITICAL UNDERSTANDING to problems and issues.
- An Where the candidate demonstrates the ability to **ANALYSE** the problem using appropriate economic ideas.
- **E** Where the candidate **EVALUATES** and makes judgements about the significance of various issues and arguments.

Synoptic Assessment

All questions in this unit are synoptic. Therefore, students will need to demonstrate that they are able to think as an economist and to use effectively the economist's 'tool kit' of concepts, theories and techniques.

Students should demonstrate that they:

- understand the inter-relatedness of many economic issues, problems and institutions;
- understand how certain economic concepts, theories and techniques may be relevant to a range of different contexts;
- can apply concepts, theories and techniques in analysing economic issues and problems and in evaluating arguments and evidence.

QUALITY OF WRITTEN COMMUNICATION

Quality of Written Communication (QWC) will be assessed in Questions 03, 06, 08, 10 and 12 only.

Students will be assessed according to their ability to:

- ensure that text is legible, and that spelling, grammar and punctuation are accurate, so that meaning is clear
- select and use a form and style of writing appropriate to purpose and complex subject matter
- organise information clearly and coherently, using specialist vocabulary when appropriate.

No specific marks are awarded for QWC.

However, examiners should take into account QWC when determining the mark to be awarded for an answer. This means an answer could be taken either up (for exceptional QWC) or down (for very poor QWC) by 1 mark (and no more).

1 THE GLOBAL CONTEXT

Total for this Context: 40 marks

01 Using Extract A, calculate, to **two** decimal places, the UK's coal consumption as a percentage of China's, **and** identify **one** other significant feature of the data shown.

(5 marks)

The calculation

For the correct answer (1.87%) The 'unit' (% or per cent) must be shown.	3 marks
For the correct answer without a unit shown	2 marks
Any other answer between 1.8 and 1.9 (inclusive) irrespective of decimal places, with unit shown.	2 marks
Any other answer between 1.8 and 1.9 (inclusive) irrespective of decimal places, without unit shown.	1 mark
For showing the correct method but arriving at a wrong number, ie 36×100 1925 = wrong number	1 mark

Identifying one significant feature

For identifying a significant feature (1 mark) and providing relevant and accurate supporting data (1 mark) with 'unit' (million tonnes) stated (1 mark).	Up to 3 marks
For a 'trawl' through the numbers, or for simply providing an item of data seemingly chosen at random with no clear significance.	0 marks

Significant features include:

- Russia has the lowest consumption of non-hydro 'renewables' at 0.1 mn tonnes
- The USA is the largest oil consumer of the group (831 mn tonnes)

Note: the question asks for 'significant feature', but a 'significant point of comparison' either international, within a country, or both is acceptable, e.g.

- Russia is the only country where gas consumption (372 mn tonnes) is greater than oil (153 mn tonnes)
- Britain's hydro consumption, at 1 mn tonnes, is very small compared to the others, the USA's, for example at 61 mn tonnes.

MAXIMUM FOR PART 01: 5 MARKS

02 Explain what is meant by a "finite' resource" (**Extract B**, line 4) and analyse why it might be argued that environmental policies are 'bad for business' (**Extract B**, line 15).

(10 marks)

Explanation	
For a relevant explanation of a finite resource eg in terms of a resource that once consumed cannot be replaced / renewed, or is limited in supply (2 marks) and therefore will become more scarce over time (2 marks).	Up to 4 marks
Note: the stress of the question is on the word "finite". If "resource" is defined, this can be awarded up to 2 marks; but "finite" must be defined for the full 4 marks.	

Maximum of 4 marks for the explanation

Analysis of reasons

Award one mark for each step in a logical chain of reasoning.

For Example

- Environmental policies might impose extra costs on businesses (1 mark) for example via taxes (1 mark) or through requirements for types of equipment (1 mark), such as catalytic converters being fitted to cars (1 mark). If these policies are unilateral, then international competitiveness might be damaged (1 mark). There may be bureaucratic costs (1 mark).
- Further elaboration of a relevant aspect, e.g the effects of environmental taxes

Up	to 8 marks for the analysis
For making appropriate use of diagrams, eg S & D analysis showing taxation, the effects of 'peak oil' (mentioned in the text) or another relevant example such as rising average costs	Up to 2 marks per diagram (1 mark for labelling, 1 mark for correct information shown) to a maximum of 3 marks

MAXIMUM FOR PART 02:10 MARKS

03 'In tackling environmental problems there is not really a straight choice between perfectly performing markets on the one hand, and wonderfully wise governments on the other.' (**Extract C**, lines 18-19).

Using the data and your knowledge of economics, assess the relative importance of market forces and government intervention in encouraging businesses to behave responsibly towards the environment.

(25 marks)

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	Good analysis and good evaluation	22 to 25 marks Mid-point 24
Level 4	Good analysis <u>but</u> limited evaluation OR Reasonable analysis <u>and</u> reasonable evaluation	17 to 21 marks <i>Mid-point 19</i>
Level 3	Reasonable answer, including some correct analysis but very limited evaluation	10 to 16 marks <i>Mid–point 13</i>
Level 2	Weak with some understanding	4 to 9 marks Mid-point 7
Level 1	Very weak	0 to 3 marks Mid-point 2

Where there is no explicit reference to the data, award a maximum of 21 marks.

Refer also to the issues and areas for discussion on the next page.

Issues and areas for discussion include

Introduction	Definitions/descriptions of, eg	
	 Market forces Government intervention/ regulation 	
Developing the	Comments from own economic knowledge or based on the data, eg	
response to the question (application)	 Further comments on Extract A, (international comparisons of green/ non-green energy sources) 	
	• Examples from Extract B of businesses behaving responsibly, e.g seeking new fuels for aircraft, developing electric cars.	
	 Market forces clashing with government predictions, e.g. seeking new oil while wanting to limit climate change (Extract B) 	
	• Failures of regulation (Extract C)	
	Unsustainable business model (Extract C)	
Developing the response to the question	Arguments for regulation / intervention eg Market failure 	
(analysis)	 Negative externalities Inability of markets to make long term predictions Health and safety issues arising from environmental problems The need for coordinated international action 	
	Arguments for market forces eg	
	Government failure	
	Efficiency Competition enterprise efficiency	
	Signalling, incentive, rationing functions of price	
Evaluation	• Evaluation of policies in general, e.g. command and control vs. market- focused policies	
	• Evaluation of some specific policies, e.g. prohibitions, regulations, vs. pollution permits, carbon off-setting, taxes, subsidies	
	 Discussion of the quotation (perfectly performing markets vs. wonderfully wise governments) 	
	 Consideration of why environmental policies might be good for business and also why it is good for business to respect the environment 	
	Advantages and disadvantages of a mixed economy approach Market failure versus government failure	
	 Need for privatisation to be accompanied by effective regulation 	
	• Discussion of the claim about privatised profits and nationalises costs	
	Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.	

Also give credit for	Relevant diagramsAn overall judgement on the issues raised.
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It will only be possible for candidates to consider a few of the issues and areas noted. They may also discuss issues not mentioned in the table.

USE THE DETAILED LEVELS MARK SCHEME ON PAGES 4 AND 5 FOR FURTHER CLARIFICATION.

MAXIMUM FOR PART 03: 25 MARKS

2 THE EUROPEAN UNION CONTEXT

Total for this Context: 40 marks

04 Using **Extract D, Graph (i)**, calculate the Spanish minimum wage as a percentage of that of the Netherlands, **and** identify **one** significant point of comparison between information in **Graph (i)** and information in **Graph (ii)**.

[5 marks]

The calculation

For the correct answer 50%	3 marks
The 'unit' (per cent or %) must be shown.	Jindika
For the correct answer without a unit shown.	2 marks
Any other answer between 49 and 51 (inclusive), with unit shown.	2 marks
Any other answer between 49 and 51(inclusive), without unit shown.	1 mark
For showing the correct method but arriving at an incorrect answer ie $\frac{750}{1500}$ = incorrect answer 1500	1 mark

Identifying one significant point of comparison

For identifying a significant comparison (1 mark) and providing relevant and accurate supporting data (1 mark) with 'units' (euros and / or per cent) (1 mark)	Up to 3 marks
For a 'trawl' through the numbers, or for simply providing an item of data seemingly chosen at random with no clear significance.	0 marks

Significant points of comparisons include:

- Luxembourg has the highest minimum wage in Graph (1) at approx 1800 euros, but in Graph (ii) it has in the second highest percentage earning less than 105% of the minimum wage, with 10%.
- France has a higher minimum wage than the UK (approx 1390 compared with1260 euros, in Graph (i), but a higher proportion earning less than 105% of the minimum wage (9 compared with 4%) in Graph (ii).
- Slovenia is in the middle of the group in Graph (i), at approx 760 euros, but is has the highest figure in Graph (ii), with approx 19% earning 105% or less of the minimum wage.

MAXIMUM FOR PART 04: 5 MARKS

05 Explain the difference between 'equality' and 'equity' (**Extract E**, line 3), and analyse why, left to market forces, some workers will earn very low wages.

(10 marks)

Explanation	
For defining/describing equity, in terms of fairness (2 marks) and equality, in terms of distribution of income or wealth (2 marks) ;	Up to 4 marks

Analysis of reasons

Award 1 mark for each step in a logical chain of reasoning.

For example

- Wages can be considered the price of labour (1 mark); the demand for labour comes from employers (1 mark); the supply of labour comes from employees (1 mark). The basic reason for low pay in certain occupations is that demand is low (1 mark) and/ or supply is high (1 mark). Low skilled labour, for example, requiring no qualifications has a large potential supply (1 mark), and demand is weak, for various reasons, e.g. since this kind of labour can often be easily automated (1 mark)
- Other influences, e.g.
 - o marginal revenue product;
 - o price elasticity of demand for and supply of labour;
 - o imperfections in the labour market, immobility, discrimination,
 - o collective bargaining (or the lack of trade unionisation).

	Up to 8 marks for the analysis
Make appropriate use of diagrams, eg S & D for labour; MRP	Up to 2 marks per diagram (1 mark for labelling, 1 mark for correct information shown) to a maximum of 3 marks

MAXIMUM FOR PART 05: 10 MARKS

06 'The living wage is based on the amount an individual needs to earn to cover the basic costs of living and lead a "decent life".' (Extract F, lines 6-7).

Using the data and your knowledge of economics, assess whether the UK government should legislate to make the national minimum wage a living wage, or whether there are better ways of improving the earning power of the low paid.

(25 marks)

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	Good analysis <u>and</u> good evaluation	22 to 5 marks Mid-point 24
Level 4	Good analysis <u>but</u> limited evaluation OR Reasonable analysis <u>and</u> reasonable evaluation	17 to 21 marks <i>Mid-point 19</i>
Level3	Reasonable answer, including some correct analysis but very limited evaluation.	10 to 16 marks <i>Mid-point 13</i>
Level 2	Weak with some understanding	4 to 9 marks <i>Mid–point 7</i>
Level 1	Very weak	0 to 3 marks <i>Mid–point</i> 2

Where there is no explicit reference to the data, award a maximum of 21 marks.

Refer also to the issues and areas for discussion on the next page.

Issues and areas for discussion include

Introduction	Definitions of minimum wage, living wage, earning power
	Distinction between income and wealth
Developing the	Comments from own economic knowledge or based on the data, eg
response to the	EU context (Extract E)
question (application)	• Discussion of differences between NMW and living wage (Extract E)
	Levels and comparisons (Extract F)
Developing the	Who are the low [aid?
response to the	Possible effects of NMW on output and employment
(analysis)	 Benefits of a living wage, e.g. reduced labour turnover, increased productivity, reduced government subsidies for low wages
	Increased costs of living wage, effects on sectors/ general economy
	Other methods of raising wage levels, e.g. productivity enhancement, skills, education and training
	Benefits and welfare to work
	Impact of taxes
	Short and long run considerations
	Money costs of NMW
	Opportunity costs of government subsidies for the low paid
	External costs of inequality
	The economic disfunctionality of inequality
Evaluation	 General arguments for and against government intervention in labour markets
	Market failure versus government failure
	• Consideration of the issues from different points of view, e.g. employers, employees, taxpayers
	Consideration of the affordability of NMW
	Consideration of the affordability of the alternatives to NMW
	 The government's own position as a major employer (local and national government)
	 Efficacy of NMW compared with other policies Consideration of the definition of living wage (how to define 'decent' standard of life)
	 What is the value of a NMW if it is not a 'living' wage?
	A high-wage economy versus a low-wage economy
	Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.

Also give credit for	DiagramsAn overall judgement on the issues raised.
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It will only be possible for candidates to consider a few of the issues and areas noted. They may also discuss issues not mentioned in the table.

USE THE DETAILED LEVELS MARK SCHEME ON PAGES 4 AND 5 FOR FURTHER CLARIFICATION

MAXIMUM FOR PART 06: 25 MARKS

SECTION B

Essay 1

Total for this Essay: 40 marks

'In the middle of the twentieth century, the UK had more than 20 large car producing companies and a countless number of small, local manufacturers, many of which also produced motorbikes and pedal cycles. Now there is no single car producer that is purely 'British' and, globally, there are probably fewer than 20 significant car producers in the world.'

07 Explain how economic theory suggests that perfect competition among many small firms leads to an efficient allocation of resources.

(15 marks)

For relevant definitions, eg perfect competition (2 marks),
efficient resource allocation (2 marks)

Up to 2 marks per point defined or explained to a maximum of 4 marks

For explanation – award 1 mark for each link in a logical chain of reasoning to a maximum of 15 marks.

Examples include

- Economic theory predicts that under the conditions perfect competition the market will move towards a long run equilibrium (1 mark) where firms are earning only normal profits (1 mark) and there is no incentive (1 mark) for existing firms to leave (1 mark) or new firms to enter (1 mark) the industry. At that point P = MC = MR = AC = AR (1 mark). If price equals marginal cost, the producer is compensated for putting the resources together to produce a good or service (1 mark). If price also represents the marginal benefit, then consumers believe a purchase compensates them for the hard-earned money they spend (1 mark). If marginal cost = marginal benefit neither consumers nor producers are benefitting at the expense of the other (1 mark) while consumers are receiving the goods and services they want (1 mark). This gives allocative efficiency (1 mark). If MC = AC, then AC must be at its lowest point and this gives productive efficiency (1 mark). So profit maximisation (MC =MR) (1 mark) by a large number of small firms has led to an efficient allocation of resource (1 mark).
- Because they do not act as price-takers, and AR is therefore not equal to MR firms in any imperfect form of competition cannot achieve all five elements of P = MC = MR = AC =AR at a single equilibrium point and in that sense is less efficient than perfect competition

For students who do not go directly to the LR equilibrium position, but start with the short run, distinguish between firm and industry, and proceed through the 'steps' towards achieving LR equilibrium:

• Allow **up to 2 marks** for a mere 'list' of conditions of perfect competition. Individual conditions can be credited (**1 mark** each) only if they are discussed within a logical chain of reasoning that explains price-taking and competitive behaviour.

Use of diagrams to support explanations, eg Perfect competition, equilibrium, short/ long run	Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.
Relevant real world examples and/or relevant reference to the UK and/or other economies.	1 mark per reference to a maximum of 2 marks

MAXIMUM FOR PART 07:15 MARKS

08 Evaluate whether growing market concentration and monopoly power, in an industry such as motor manufacturing, are necessarily undesirable.

(25 marks)

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	Good analysis <u>and</u> good evaluation	22 to 25 marks Mid–point 24
Level 4	Good analysis <u>but</u> limited evaluation OR Reasonable analysis <u>and</u> reasonable evaluation	17 to 21 marks <i>Mid-point 19</i>
Level 3	Reasonable answer, including some correct analysis but very limited evaluation.	10 to 16 marks <i>Mid–point 13</i>
Level 2	Weak with some understanding	4 to 9 marks <i>Mid–point 7</i>
Level 1	Voruwoak	0 to 3 marks

Issues and areas for discussion include

Introduction	 Definitions of, eg concentration monopoly power
Developing the response to the question Application/ Analysis	 Advantages of concentration/ monopoly Economies of scale International competitiveness Patents, copyrights, etc Public interest arguments, e.g. strategic industries, employment issues Dynamic efficiency Natural monopoly Disadvantages Consumer surplus transferred to producers Deadweight losses Higher prices, lower output, under-used capacity Possibility of collusion Market failure
Evaluation	 Critical discussion of the quotation Advantages versus disadvantages of monopoly/ concentration Possibility of price discrimination (positives and negatives) Need for government intervention and regulation Collusion distinguished from cooperation/ collaboration Static / dynamic efficiency Is perfect competition always 'perfect'? Does 'perfect' necessarily signal 'the best'? Global issues (large firms more resilient than small ones faced with international competition and corporatism) Advantages of monopoly in certain situations (e.g. NHS vs health markets) Application to particular industries, such as motor manufacturing Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.

Also give credit for	 Diagrams An overall judgement on the issues raised Examples.
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It will only be possible for candidates to consider a few of the issues and areas noted. They may also discuss issues not mentioned in the table.

USE THE DETAILED LEVELS MARK SCHEME ON PAGES 4 AND 5 FOR FURTHER CLARIFICATION

MAXIMUM FOR PART 8: 25 MARKS

Essay 2

Total for this Essay: 40 marks

'In the real world of business, two observations can consistently be made. Firstly, sooner or later, the law of diminishing returns will operate; and secondly, over time, profit maximising is always a key goal.'

09 Explain the difference between diminishing returns to a factor in the short run, and returns to scale in the long run.

(15 marks)

For relevant definitions, eg fixed / variable factor (2 marks), short/ long run (2 marks) Returns to scale (2 marks)

Up to 2 marks per point defined or explained to a maximum of 4 marks

For explanation - Award 1 mark for each step in a logical chain of reasoning, up to 15 marks.

Examples include

The law of diminishing returns (LDR) shows both factor combination and factor substitution (1 mark). It is a short run law, meaning that a variable factor, such as labour (1 mark) is combined with other factors, at least one of which, such as a machine or factory building, (1 mark) is fixed in terms of size or scale (1 mark) and hence productive capacity (1 mark). In effect, an increasing use of a variable factor is used as a substitute for more of the fixed factor (1 mark), and since factors are not perfect substitutes, diminishing returns sets in (1 mark). LDR shows how output changes (1 mark) in proportion to factor inputs (1 mark) as the fixed factor approaches and passes its optimal capacity (1 mark). In the short run, we can confidently predict that LDR will set in at some point affecting marginal, average and total returns (1 mark).

Returns to scale (RTS) operate in the long run (**1 mark**), when all factors are variable in size or scale (**1 mark**). RTS show how output changes as the scale of the production unit increases (**1 mark**). RTS occur in the long run, and nobody can predict the future, so economies of scale are less predictable and less certain than short-run diminishing returns (**1 mark**). There is the possibility of long run decreasing returns to scale (**1 mark**)

- Allow maximum of 2 marks for a mere list of different types of scale economy (managerial, technical, etc). Individual types of economy of scale can only earn 1 mark if they are integral to the logical chain of discussion explaining long run changes in returns.
- Up to **3 marks** for describing increasing returns, constant returns, and decreasing returns to scale as a relevant part of the discussion
- While the law of diminishing returns is related to physical output, not the value of output, the law underlies the shape of average and marginal cost curves. Students can therefore discuss this question by reference to short run cost curves, which are the mirror image of physical product curves, with short run costs falling (efficiency increasing) as optimal capacity utilisation is approached, then rising (efficiency reducing). Economists typically draw a long run average cost curve (envelope curve) reflecting increasing returns to scale (falling LRAC), constant returns (horizontal LRAC) and decreasing returns (rising LRAC).

Use of diagrams to support the explanation, eg marginal and average physical product curves and / or cost curves	Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.
Relevant real world examples and/or relevant reference to the UK and/or other economies.	1 mark per reference to a maximum of 2 marks

MAXIMUM FOR PART 09 15 MARKS

10 Evaluate the view that, for all firms, whether small or large, in the long run, profit maximisation is always more important than any other business objective.

(25 marks)

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	Good analysis and good evaluation	22 to 25 marks Mid–point 24
Level 4	Good analysis <u>but</u> limited evaluation OR Reasonable analysis <u>and</u> reasonable evaluation	17 to 21 marks <i>Mid</i> –point 19
Level 3	Reasonable answer, including some correct analysis but very limited evaluation.	10 to 16 marks <i>Mid–point 13</i>
Level 2	Weak with some understanding	4 to 9 marks <i>Mid–point 7</i>
Level 1	Very weak	0 to 3 marks <i>Mid–point 2</i>

Issues and areas for discussion include

Introduction	Basic definitions/descriptions of
	 long run, profit maximisation business goals/ objectives
Developing the response to the question Application/ Analysis	 The importance of the profit motive. Relevance of the size of firms The functions of the entrepreneur: ownership, control, decision making and risk taking in small firms and large firms Directors versus managers Decision-making in small firms and large firms The impact of a divorce between ownership and control Other possible objectives Sales maximisation Revenue / turnover maximisation Maximisation of Market share Maximisation of company size (world domination) Industry-specific objectives e.g. newspaper circulation, TV viewing figures
	 Social welfare maximisaton Satisficing
Evaluation	 Critical discussion of the quotation Bonus culture Short run vs long run Large firms vs small firms Overall view of the various possible objectives Is any one objective sufficient, or do firms need a range of objectives? Importance of profits for investment Can any other objectives be achieved in the long run if profits are not achieved? Is profit maximising actually possible? Do firms have the information? Can they track MC, MR etc?
	and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.

Also give credit for	 Diagrams An overall judgement on the issues raised
	Examples.

It will only be possible for candidates to consider a few of the issues and areas noted. They may also discuss issues not mentioned in the table.

USE THE DETAILED LEVELS MARK SCHEME ON PAGES 4 AND 5 FOR FURTHER CLARIFICATION

MAXIMUM FOR PART 10: 25 MARKS

Essay 3

Total for this Essay: 40 marks

'Most consumers know, more or less, when and why they are likely to want to replace a TV set or mobile phone. Nobody really knows in advance when or why they might need to go into hospital for a new knee-cap or hip joint.'

11 Explain why imperfect information might lead to market failure in the case of merit goods and demerit goods.

(15 marks)

For relevant definitions eg imperfect information (2 marks), merit goods (2 marks), demerit goods (2 marks); market failure (2 marks) Up to 2 marks per point defined or explained to a maximum of 4 marks

For explanation - Award 1 mark for each step in a logical chain of reasoning up to 15 marks.

Examples include

- Poor information (1 mark) or asymmetric information (1 mark) are among a number of possible reasons for market failure (1 mark). When merit goods are consumed benefits do not stop with the prime consumer (1 mark), but spill over into the neighbourhood (1 mark) as positive externalities (1 mark). The consumer will not necessarily be aware of these benefits (1 mark) and so will not base spending decisions on this information (1 mark). Since individual consumers under-estimate the social benefits of their consumption, (1 mark) merit goods tend to be under-consumed (1 mark). It follows that they are also under-supplied (1 mark). Demerit goods are those where costs do not stay with the consumer (1 mark), but spill over into the neighbourhood (1 mark) as negative externalities (1 mark)
 - Imperfect information might affect consumers in the LONG RUN, causing them to demand too much or too little, compared with what they might have consumed if they were fully aware of the future consequences to themselves.
 - Market signals tell us about what is happening now, they are not adept at foreseeing the future; current market signals might, for instance, tell us to close down an industry, a decision that might be regretted some time later when conditions change (e.g. the policy of closing branch railway lines in favour of roadbuilding in the 1960s)

Use of diagrams to help support explanations, MSC/ MSB diagrams for merit and demerit goods.

Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.

ant real world examples and/or relevant reference to the	1 mark per reference to a maximum of 2 marks
	2 IIIdi K5

MAXIMUM FOR PART 11: 15 MARKS

12 Discuss whether economic welfare would necessarily be increased if the provision of merit goods and public goods were always left to governments without ever involving markets. (25 marks)

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	Good analysis <u>and</u> good evaluation	22 to 25 marks Mid-point 24
Level 4	Good analysis <u>but</u> limited evaluation OR Reasonable analysis <u>and</u> reasonable evaluation	17 to 21 marks <i>Mid-point 19</i>
Level 3	Reasonable answer, including some correct analysis but very limited evaluation	10 to 16 marks <i>Mid-point 13</i>
Level 2	Weak with some understanding	4 to 9 marks <i>Mid-point 7</i>
Level 1	Very weak	0 to 3 marks <i>Mid-point</i> 2

Issues and areas for discussion include				
Introduction	Definitions, examples:			
	 Economic welfare 			
	 Merit goods, distinguished from public goods 			
	 Asymmetric information 			
	 Missing markets 			
Developing	Reasons for government provision, e.g.			
the response	Positive externalities			
to the	Negative externalities			
question	Unequal income distribution			
	Relative and absolute poverty; unequal life chances			
Application	Merit goods			
/Analysis	 Social objectives : health, education 			
	 Economic objectives: infrastructure. efficiency 			
	 Equity arguments ('social wages' from public services) 			
	 Imperfect information 			
	Missing markets			
	• Public goods			
	 Social or strategic importance (e.g. defence, law & order) 			
	Non-rivalry			
	Non-diminishable			
	Non-excludable / pure/ non-pure			
	Arguments for involving markets, eq			
	\circ Trickle down arguments			
Evaluation	Critical discussion of the quotation			
	Different approaches to			
	 Merit goods and public goods 			
	 Different types of merit good 			
	• Merit and demerit goods			
	Is this a really case of either/ or?			
	Can the private sector function efficiently without a public sector (and vice			
	versa)			
	Can the private sector be trusted to function properly without intervention?			
	Possibility of public/ private partnerships			
	Money costs and opportunity costs			
	Real world examples such as public and private transport, primary,			
	secondary, tertiary education; tuition fees versus graduate taxes; public			
	universities, private universities			
	 Overall view of advantages and disadvantages of private and state 			
	provision			

	Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.
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Also give credit for	 Diagrams An overall judgement on the issues raised Examples.
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It will only be possible for candidates to consider a few of the issues and areas noted. They may also discuss issues not mentioned in the table.

USE THE DETAILED LEVELS MARK SCHEME ON PAGES 4 AND 5 FOR FURTHER CLARIFICATION

MAXIMUM FOR PART 12: 25 MARKS