

General Certificate of Education

Economics 6141

ECN5 Business Economics and the Distribution of Income

Mark Scheme

2005 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' 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.

Advanced Level Economics

June 2005 ECN 5

MARK SCHEME

General Instructions

Marks awarded to candidates 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 (a) and (b) of the data response question and part (a) of the essay questions adopts this approach. The questions do not generally require that the candidate demonstrates evaluative skills although some explanation and analysis may be expected. The mark scheme lists the marks that can be awarded for particular issues (and associated development) that the candidate might include in the answer. Marks awarded for development should take into account the Quality of Written Communication used by candidates as indicated on page 4 of this mark scheme.
- (ii) A 'levels' approach. This approach is used for parts (c) and (d) of the data response question and part (b) of the essay questions. The mark scheme summarises the information required to answer the question, but without attaching marks to particular issues. Marks should be awarded according to whether the answer displays the skills indicated by the five Mark Band Descriptors or "Levels of Skill" included in the mark scheme. The Mark Band Descriptors are set out on page 3. When using a 'levels' mark scheme the marker must identify where a particular skill is being demonstrated. The key to be used to identify the skill is also shown on page 4. 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.

APPLYING THE 'LEVELS' MARK SCHEME Levels of Response Mark Band Descriptors

Level 1:

Few, if any, relevant issues recognised. Economic concepts and principles are not adequately understood or applied to the question and its context. No satisfactory analysis or evaluation. Little, if any, appreciation of the inter-relatedness of economic issues, problems and institutions. A poorly organised response which generally fails to answer the question. Descriptions and explanations lack clarity. Spelling, punctuation and grammar are likely to be poor. There is very little use of specialist vocabulary.

0 to 6 marks (Mid-Point: 3 marks)

Level 2:

A few issues are recognised but there is only limited evidence of the candidate's ability to apply relevant economic concepts. An attempt is made to answer the question but there is little satisfactory analysis or evaluation. Some very limited appreciation of the inter-relatedness of economic issues, problems and institutions. A poorly organised answer which does not have a clear structure. Descriptions and explanations are sometimes hard to follow. The candidate demonstrates some ability to spell commonly used words and to follow the standard conventions of punctuation and grammar. Some use of specialist vocabulary is made but this is not always applied appropriately. 7 to 12 marks (Mid-Point: 10 marks)

Level 3:

A few issues recognised. The candidate has attempted to apply relevant economic concepts and ideas to the question and its context. A reasonable understanding of some concepts and theories is demonstrated. However, the evaluation of issues, arguments and evidence is limited and superficial. Some understanding of the inter-relatedness of economic issues, problems and institutions. There is some logic and coherence in the organisation of the answer. The candidate is generally able to spell commonly used words usually follows the standard conventions of punctuation and grammar. Some descriptions and explanations are easy to understand but the answer may not be expressed clearly throughout. Some use of specialist vocabulary which is applied appropriately.

13 to 20 marks (Mid-Point: 17 marks)

Level 4:

Several relevant issues identified. Good understanding of some economic concepts and principles is demonstrated. The candidate is able to apply these concepts and principles to the context to help answer the question. There is some appreciation of alternative points of view. Satisfactory use is made of evidence and/or theoretical analysis to evaluate the issues and arguments identified. Good understanding of the inter-relatedness of economic issues, problems and institutions is demonstrated Shows the ability to think as an economist making effective use of the economist's 'tool kit' of concepts, theories and techniques. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed. The answer is well organised. Descriptions and explanations are usually clearly expressed. A wide range of specialist vocabulary which is used with facility.

21 to 26 marks (*Mid-Point: 24 marks*)

Level 5:

Several relevant issues identified. Good understanding of economic concepts and principles demonstrated throughout. The candidate is able to apply these concepts and principles to the context to help answer the question. There is an appreciation of alternative points of view. Good use is made of evidence and/or theoretical analysis to evaluate the issues and arguments identified. The candidate demonstrates the ability to synthesise the arguments presented and come to a reasonable conclusion albeit tentative. A clear understanding of the inter-relatedness of economic issues, problems and institutions is demonstrated Shows the ability to think as an economist making very effective use of the economist's 'tool kit' of concepts, theories and techniques. Spelling is accurate and the standard conventions of punctuation and grammar are followed. The answer is well organised. Descriptions and explanations are expressed with clarity throughout. Extensive use of specialist vocabulary which is applied adeptly and with precision.

27 to 30 marks (Mid-Point: 29 marks)

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.
- A 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.

QUALITY OF WRITTEN COMMUNICATION

The Mark Band Descriptors, which are used for assessing Question 1 (d) and part (b) of the essay questions, incorporate statements which relate to the Quality of Written Communication used by the candidates.

However, it is also important to assess Quality of Written Communication whenever candidates produce answers using continuous prose. When applying an issue based mark scheme, examiners must take into account the following when deciding how many marks to award for development:

- (i) use of appropriate format and style of writing to organise relevant information clearly and coherently;
- (ii) use of specialist vocabulary, where appropriate;
- (iii) legibility of handwriting;
- (iv) accuracy of spelling, punctuation and grammar.

Synoptic Assessment

All questions in this unit are synoptic. Therefore candidates 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.

They 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.

Section A

1 Total for this question: 50 marks

(a) Using **Extract A**, identify **one** external cost and **one** external benefit resulting from the development and introduction of Concorde, **and** briefly explain why each is an external cost or benefit.

(4 marks)

For candidates who:

identify an external cost (costs 4 or 5 in Extract A):

1 mark

provide an explanation of why it is an external cost:

up to 2 marks

(The explanation can be related to third-party or spin-off effects, or the cost being generated and received outside the market, or a clear explanation of why it is not a private cost. The explanation must refer to costs rather than to benefits.)

identify an external benefit (benefits 2 or 5 in Extract A):

1 mark

provide an explanation of why it is an external benefit:

up to 2 marks

(The explanation can be related to third-party or spin-off effects, or the benefit being generated and received outside the market, or a clear explanation of why it is not a private benefit. The explanation must refer to benefits rather than to costs.)

Maximum of 2 marks for an answer restricted to accurate identification and explanation of EITHER an external cost OR an external benefit

MAXIMUM FOR PART (a) 4 MARKS

1 (b) Explain why the demand for Concorde flights was thought to be "more price elastic than that for long-haul air flights in general" (**Extract B**, lines 7 and 8). (6 marks)

For candidates who:

define price elasticity of demand, or provide a correct formula for its measurement: 1 mark explain that a larger price elasticity of demand statistic means that the proportionate response of consumers to a price change is greater than in the case of a smaller elasticity: 1 mark 1 mark illustrate price elasticity of demand accurately on one or more diagrams: state that a determinant of price elasticity of demand is substitutability: 1 mark explain how substitutability affects price elasticity of demand: 1 mark explain that because there are no close substitutes for long-haul air travel, demand is price-inelastic: 2 marks explain that because subsonic air travel is a substitute, demand for Concorde is more price-elastic: 2 marks

make any other relevant point in this context eg, explaining price elasticity of

demand in terms of the width of the definition of the market:

MAXIMUM FOR PART (b) 6 MARKS

2 marks per relevant point

1 (c) Shortly after the information in **Extract B** was published, and before most governments deregulated routes, individual airlines began to break collusive agreements they had made with other airlines. Analyse why an airline might wish to break the collusive agreement described in lines 9-12 of **Extract B**. (10 marks)

Reasons why an airline might wish to break the collusive agreement include: believing the airline can be more profitable outside such an agreement; lack of trust in other members of the agreement; the agreement's lack of effectiveness; a desire to pre-empt possible governmental attacks on the agreement.

Issues and areas for discussion and explanation include:

- The meaning of collusion, especially in the context of oligopoly and cartels
- Collusion as a means of reducing uncertainty
- Collusion and joint profit maximisation
- Collusion and 'an easy life'
- How collusion prevents competition
- The owner's desire to be entrepreneurial
- The benefits of competition for a particular airline
- Profit-maximising and other possible business objectives
- Explanation and analysis in terms of elasticity of demand.
- Relevant use of game theory or a theoretical model of oligopoly

LEVEL 1

At the bottom of the range, the candidate who does not attempt any analysis, but whose answer understands collusion. At the top of the range, the candidate who analyses a reason for collusion, but who does not address the issue posed by the question.

1 to 3 marks

LEVEL 2

At the bottom of the range, the candidate who briefly mentions one reason why an airline may wish to break a collusive agreement, but who does not develop the answer. At the top of the range, the candidate develops the analysis of at least one reason, but incoherently or with mistakes.

4 to 7 marks

LEVEL 3

At the bottom of the range, the candidate relevantly develops the analysis of one reason for breaking a collusive agreement in good detail. Alternatively two or more reasons may be analysed less well. At the top of the range, the candidate provides a confident and full analysis of one reason for breaking a collusive agreement, or analyses two or more reasons in some detail and without significant mistakes. The answer may take issue with the question, arguing that some airlines may continue to collude.

8 to 10 marks

MAXIMUM FOR PART (c) 10 MARKS

1 (d) Before investing in the development of Concorde, the United Kingdom government decided against undertaking a cost benefit analysis of the project.
 Using the data and your economic knowledge, evaluate the case for and against a government undertaking cost benefit analysis of projects such as Concorde. (30 marks)

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Explanation/analysis is needed to reach Level 3, and some evaluation, building on the analysis, is required to score 21 marks or higher (Levels 4 and 5). An answer which describes the techniques of cost benefit analysis, but which does not address the issue posed by the question, should be restricted to Level 2. An answer which explains at least one argument in favour of CBA of a project such as Concorde, and at least one argument against such a CBA, but which does not evaluate the arguments, either implicitly or explicitly, should be restricted to Level 3. Level 4 answers will contain analysis and evaluation, but some mistakes and/or narrowness of answer. Level 5 answers will analyse and evaluate a wider range of issues, and they will be largely free of mistakes. Level 5 answers also require application of the Concorde case study. Knowledge of discounting the future and shadow pricing is **not** required.

Maximum of 21 marks if there is no use of the data

Issues and areas for discussion include:

- the meaning of cost benefit analysis
- reasons why cost benefit analysis is undertaken
- the disadvantages of undertaking cost benefit analysis
- the difference between CBA and private sector investment appraisal
- analysis of private and external costs and benefits
- the problem of quantifying external costs and benefits, and future costs and benefits
- the political reasons for using, or not using, cost benefit analysis
- relevant use of the data
- application of knowledge
- assessment of strengths and weaknesses of opposing arguments

Also give credit for:

- relevant use of data and/or candidate's knowledge
- relevant use of evidence
- overall assessment

USE THE LEVELS MARK SCHEME ON PAGES 3 & 4

MAXIMUM FOR PART (d) 30 MARKS

TOTAL FOR THIS QUESTION: 50 MARKS

Section B

Total for this question: 50 marks

2

2 (a) Explain why economists usually regard monopoly as an undesirable form of market structure.

(20 marks)

For candidates who:

define market structure: 2 marks

define a pure monopoly:

define a monopoly in some other relevant way, eg a firm with 25% of a market:

distinguish between monopoly and monopoly power:

provide an example of a monopoly, or of a firm with considerable monopoly

2 marks

1 mark

up to 3 marks

power, eg Microsoft (only one example needed for the mark):

1 mark

state that a monopoly may restrict output and raise the price:

up to 2 marks
explain this:

up to a further 4 marks

explain why a monopoly is inefficient: 1 plus 3 marks per type of inefficiency

explain any other relevant point, eg;

- that monopolies exercise producer sovereignty at the expense of consumer sovereignty
- the adverse effects of monopoly price discrimination
- restriction of choice
- loss of consumer choice and economic welfare
- the effect of supernormal profit on consumers:

1 plus 3 marks per point

draw a diagram to illustrate any of the above points: up to 4 marks per diagram

Maximum of 8 marks for diagrams

Do not award marks for arguments justifying monopoly

MAXIMUM FOR PART (a) 20 MARKS

2 (b) Evaluate policies a government might use to reduce the problems caused by monopoly. (30 marks)

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Explanation/analysis is needed to reach Level 3, and some evaluation, building on the analysis, is required to score 21 marks or higher (Levels 4 and 5). Two policies analysed and evaluated in depth, or three or more policies analysed and evaluated in a little less depth can reach Levels 4 and 5. An answer which explains only one method of reducing the problem of monopoly should be restricted to Level 2. An answer which considers only the advantages (or the disadvantages) of two or more policies should be restricted to Level 3. To reach Levels 4 and 5, advantages and disadvantages of two or more policies must be analysed and evaluated. A Level 4 answer will contain some mistakes and less depth, whilst a Level 5 answer will be largely mistake free and in greater depth.

Policies include: breaking up monopolies; removing entry barriers and making markets contestable; imposing price caps and other forms of regulation; taxing monopoly profit; taking private monopoly into public ownership; privatising state-owned monopolies.

Issues and areas for discussion include:

- understanding of the problem or problems of monopoly
- identification of different policies
- analysis of how a policy may reduce the problem of monopoly
- the benefits and costs of particular policies
- awareness that policies may complement each other
- second-best arguments
- market failure and government failure arguments
- assessment of strengths and weaknesses of opposing arguments

Also give credit for:

- relevant use of the candidate's knowledge
- relevant use of evidence
- overall assessment

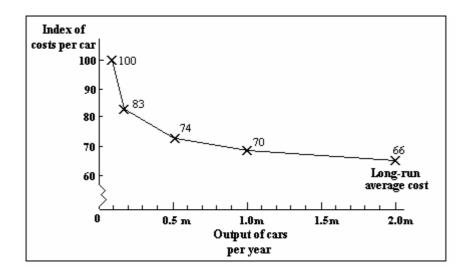
USE THE LEVELS MARK SCHEME ON PAGES 3 & 4

MAXIMUM FOR PART (b) 30 MARKS

TOTAL FOR THIS QUESTION: 50 MARKS

Total for this question: 50 marks

3 (a) Draw a long run average cost curve on a diagram to illustrate the information in the table, **and** then explain the shape of the long run average cost curve. (20 marks)



For candidates who:

3

draw and correctly label the axes: draw the curve with a roughly accurate shape and position: or draw the curve accurately: label the curve as long-run average cost(s) or LRAC:	2 marks 2 marks 4 marks 2 marks
define the long run: define average costs: state that the table (and/or curve) show(s) falling long-run average cost(s): state that economies of scale explain falling long-run average cost(s):	1 mark 1 mark 1 mark 2 marks
state a type of economy of scale (technical, managerial, financial etc.): explain a type of economy of scale:	1 mark each up to a further 3 marks per type

Maximum of 8 marks for the diagram based on plotting the data

Maximum of 2 marks for an LRAC diagram that has not been based on the data and is instead of a diagram plotting the data

Maximum of 15 marks for the written explanation

Maximum of 17 marks if explanation is not related in any way to car manufacturing

MAXIMUM FOR PART (a) 20 MARKS

3 (b) Evaluate the view that the government should give financial assistance to firms producing cars in the UK to increase their competitiveness. (30 marks)

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Explanation/analysis is needed to reach Level 3, and some evaluation, building on the analysis, is required to score 21 marks or higher (Levels 4 and 5). An answer which goes no further than describing one reason for giving, and one reason for not giving, financial assistance should be restricted to Level 2. An answer which goes no further than relating reasons to competitiveness, with no relevant reference to the car industry, should be restricted to Level 3. To reach Levels 4 and 5, advantages and disadvantages of giving financial assistance must be analysed and evaluated in the context of evidence. A Level 4 answer will contain some mistakes and less depth, whilst a Level 5 answer will be largely mistake free and in greater depth.

Issues and areas for discussion include:

- the meaning of government financial assistance
- the forms financial assistance may take, eg grants, tax breaks
- the meaning of competitiveness
- how financial assistance may improve competitiveness
- how financial assistance may attract FDI
- how financial assistance may reduce competitiveness
- opportunity cost arguments
- market failure and government failure arguments
- analysis and evaluation of factors relevant to the car industry, eg economies of scale, the role of MNCs in car production
- recent examples relating to car manufacturing in the UK, eg Rover, Japanese-owned plants, and related to UK government policy
- assessment of strengths and weaknesses of opposing arguments

Also give credit for:

- relevant use of the candidate's knowledge
- relevant use of evidence
- overall assessment

USE THE LEVELS MARK SCHEME ON PAGES 3 & 4

MAXIMUM FOR PART (b) 30 MARKS
TOTAL FOR THIS QUESTION: 50 MARKS

4 Total for this question: 50 marks

- 4 "Workers in pleasant occupations, such as 'soap celebrities', often receive high pay, while those in disagreeable occupations, such as road sweepers, are among the most lowly paid."
 - (a) How does economic theory explain such differences in pay?

(20 marks)

For candidates who:

state that a worker's reward for supplying labour divides into two parts, the money wage and the welfare, utility or satisfaction yielded by the work:

explain this point in relation to people in pleasant occupations:

apply this to an example, including the example in the question:

(maximum of 1 mark for examples)

1 mark

explain that some jobs yield negative welfare, disutility or dissatisfaction:

explain this point in relation to people in disagreeable occupations:

apply this to an example, including the example in the question:

(maximum of 1 mark for examples)

2 marks

up to 3 further marks

1 mark

state that factors other than job satisfaction or dissatisfaction affecting the demand for and supply of labour may be more important:

2 marks

explain a factor affecting the demand for labour, eg a worker's productivity: up to 3 marks per factor explain a factor affecting the supply of labour, eg a limited pool of talent: up to 3 marks per factor up to 3 marks per factor

make a relevant application of the wage elasticity of demand for labour:

make a relevant application of the wage elasticity of supply of labour:

up to 3 marks

up to 3 marks

up to 3 marks

up to 6 marks

use one or more diagrams relevantly to illustrate a particular point, eg the effect of

the elasticity of supply of labour:

up to 4 marks per set of diagrams

make further relevant reference to 'soap celebrities' and road sweepers in the answer: up to 3 marks

relevantly apply the theory of wage discrimination and / or monopsony theory: **up to 6 marks per theory** use an alternative theory, such as the Marxist theory of labour exploitation: **up to 6 marks per theory**

Maximum of 6 marks for a descriptive approach with no relevant use of economic theory Maximum of 14 marks for an answer that does not consider the effects of the pleasantness or unpleasantness of a job

MAXIMUM FOR PART (a) 20 MARKS

4 (b) Assess the case **for** and **against** the government intervening to raise the disposable income of workers on low pay. (30 marks)

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Methods of intervention include minimum wage laws, tax credits and other forms of pay and poverty related welfare benefit, tax cuts and taking the low-paid out of the tax net so as to raise disposable income.

Explanation/analysis is needed to reach Level 3, and some evaluation, building on the analysis, is required to score 21 marks or higher (Levels 4 and 5). Two methods of intervention analysed and evaluated in depth, or three or more policies analysed and evaluated in a little less depth can reach Levels 4 and 5. An answer which only describes intervention should be restricted to Level 2. An answer which considers only the case for (or the case against) intervention should be restricted to Level 3. To reach Levels 4 and 5, the case for and the case against must both be analysed and evaluated. A Level 4 answer will contain some mistakes and less depth, whilst a Level 5 answer will be largely mistake free and in greater depth.

Issues and areas for discussion include:

- the meaning of disposable income
- methods of intervention
- how intervention may affect disposable income
- the meaning of disposable income
- efficiency arguments
- equity arguments
- the correction of market failure
- the promotion of government failure.
- effects on incentives and disincentives
- issues of resource allocation and misallocation, opportunity costs
- assessment of strengths and weaknesses of opposing arguments

Also give credit for:

- relevant use of the candidate's knowledge
- relevant use of evidence
- overall assessment

USE THE LEVELS MARK SCHEME ON PAGES 3 & 4

MAXIMUM FOR PART (b) 30 MARKS

TOTAL FOR THIS QUESTION: 50 MARKS