



ASSESSMENT and  
QUALIFICATIONS  
ALLIANCE

# Mark scheme January 2003

---

## GCE

### Economics

### Unit ECN5

---

Copyright © 2003 AQA and its licensors. All rights reserved.

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales 3644723 and a registered charity number 1073334  
Registered address: Addleshaw Booth & Co., Sovereign House, PO Box 8, Sovereign Street, Leeds LS1 1HQ  
Kathleen Tattersall: *Director General*

## Unit 5: Business Economics and the Distribution of Income

### 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 below.
- (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 below. 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 below. 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 5 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. **6 to 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. **11 to 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. **18 to 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. **25 to 30 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 (c) 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**

1 (a) Using **Extract A**, compare the distribution of total original income and disposable income in the UK in 1999-2000. *(4 marks)*

For candidates who:

state that the distribution of original income (before tax and receiving welfare benefits) is unequal **1 mark**  
 and back this up with statistics **1 mark**

state that the distribution of disposable income is unequal **1 mark**  
 and back this up with statistics **1 mark**

state that the income distribution of original income is more unequal (or that the distribution of disposable income is less unequal) **1 mark**  
 and back this up with statistics **1 mark**

make a 'row by row' comparison of total income and disposable income for the top 20%, the next 20% etc., without making explicit reference to equality or inequality **up to 2 marks**

**Maximum of 3 marks if there is no comparison**

**Maximum of 3 marks if there is no use of statistics**

**MAXIMUM FOR 1 (a) = 4 MARKS**

1 (b) Explain **two** reasons why the distribution of wealth shown in **Extract B** is less equal than the distribution of income shown in **Extract A**. *(6 marks)*

For candidates who:

distinguish between income and wealth: **1 mark**

compare the tables in Extracts A and B to identify the extent to which wealth is more unequally distributed: **1 mark**

identify a particular reason e.g. income rather than wealth is taxed, the wealthy can accumulate more wealth, inheritance: **1 mark per reason**

provide further relevant explanation of an identified reason: **up to 3 further marks for explanation of each reason identified**

**Two reasons must be explained to earn all 6 marks, but 4 marks are possible if only one cause is fully explained**

**MAXIMUM FOR 1 (b) = 6 MARKS**

1 (c) Analyse how progressive income tax and means-tested welfare benefits can cause the poverty trap (Extract C, lines 10-11). (10 marks)

Issues and areas for discussion and explanation include:

- The meaning of progressive income tax and means-tested welfare benefits;
- The meaning of the poverty trap;
- Their relation to the effective marginal rate of taxation;
- How and to what extent progressive taxation causes the poverty trap;
- How and to what extent means-tested welfare benefits cause the poverty trap;
- Relevant mention of related concepts e.g. poverty, the unemployment trap.

**Level 1**

The candidate who does not provide any explanation, but defines progressive taxation and/or means-tested welfare benefits. At the top of the range, the candidate who defines both progressive taxation and means-tested benefits. At the bottom of the range, the candidate who defines only one of the concepts. **1 to 3 marks**

**Level 2**

At the top of the range, the candidate who provides an imprecise explanation of how both progressive taxation and means-tested welfare benefits cause the poverty trap, or a full explanation of one but no explanation or a completely inaccurate explanation of the other.. At the bottom the range, an imprecise explanation of one, but no explanation or a completely inaccurate explanation of the other. **4 to 7 marks**

**Level 3**

At the top of the range, the candidate who provides an accurate explanation of how both progressive taxation and means-tested welfare benefits cause the poverty trap. At the bottom the range, the candidate who provides an accurate explanation of how either progressive taxation and means-tested welfare benefits cause the poverty trap, but an imprecise explanation of the other. **8 to 10 marks**

**MAXIMUM FOR 1 (c) = 10 MARKS**

1 (d) Identify **and** evaluate the policies a government might use to reduce or eliminate the problem of the poverty trap described in **Extract C**. *(30 marks)*

The question asks first, for identification and second, for an evaluation of policies (in the plural). Two policies identified and very fully evaluated can earn full marks. Three or more policies identified and less fully evaluated can also earn full marks. A ‘shopping list’ that goes no further than identification cannot go beyond Level 2. Identification of one policy and identification, explanation/analysis of a second policy can reach a low Level 3, with identification and explanation/analysis of two policies reaching a high Level 3. Some evaluation building on the analysis is required to score 18 marks or higher (Level 4). An answer reaching Level 5 might compare the merits/demerits of two or more policies, assessing for example whether the policies are complementary or conflicting.

Policies that reduce or eliminate the poverty trap will also usually reduce or eliminate poverty. Up to 17 marks can be earned by analysis and evaluation of how such policies may reduce poverty. To reach Level 4, the analysis and evaluation must address the poverty trap, but knowledge of the trap, other than that presented in Extract C, is not required.

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.

Issues and areas for discussion include:

- Identification of relevant policies e.g. raising income tax thresholds, universal rather than means-tested benefits;
- How policies may reduce poverty;
- How a particular policy could reduce the trap;
- How a particular policy could eliminate the trap;
- Disadvantages of policy or policies e.g. universal benefits might require higher tax rates which the low-paid might have to pay;
- Use of evidence;
- Some policies, while reducing the trap, might have the perverse effect of increasing poverty e.g. abolition of all benefits;
- Unintended consequences.

**Use the Levels mark scheme described earlier.**

**MAXIMUM FOR 1 (d) = 30 MARKS**

**TOTAL FOR QUESTION 1 = 50 MARKS**

**Section B****Each question carries 50 marks**

2 (a) Explain how, when setting prices and choosing levels of output, oligopolists are affected by the interdependence of firms in the market. *(20 marks)*

For candidates who:

define oligopoly in terms of the number of firms in the market **2 marks**

state any other feature of oligopoly e.g. barriers to entry, price leadership, imperfect information **up to 2 marks per feature**

**Up to a maximum of 6 marks for definition and features of monopoly**

make a relevant distinction between competitive and collusive oligopoly **up to 2 marks**

make a basic statement of the meaning of interdependence in the context of oligopoly e.g.: a firm's need to take account of rivals' reactions when deciding its best market strategy **3 marks**

provide a developed explanation of this, in terms of an economic theory or model, such as the kinked demand curve model or the prisoners' dilemma game theory model **up to 10 marks per model**

(Maximum of 6 marks for any explanation of how price and output are determined which makes no valid reference to interdependence.)

make a basic statement of how a firm may be affected by interdependence e.g. by uncertainty, by colluding to reduce uncertainty, acting as price leader or following a price leader **2 marks per effect identified**

provide a developed explanation of any effect upon the firm e.g. a developed explanation of a cartel agreement **Up to 5 further marks per effect**

**MAXIMUM FOR 2 (a) = 20 MARKS**



- 2 (b) Evaluate the view that oligopolists should be allowed to collude or co-operate, for example by fixing prices or by undertaking joint research and product development. *(30 marks)*

An answer that goes no further than explaining the meaning of the terms in the question cannot go beyond Level 2. Explanation/analysis of the economic effects of collusion/co-operation is needed to reach Level 3, and some evaluation building on the analysis is required to score 18 marks or higher (Level 4). Very good answers may go beyond the two prompts in the question, but full marks can be gained by an answer restricted to the prompts, provided sufficient analysis and evaluation is included, for example by concluding that some forms of collusion are in the public interest but price-fixing is not.

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.

Issues and areas for discussion include:

- The meaning of collusion;
- Different forms of collusion e.g. cartels or price rings, joint product development;
- Overt and covert collusion;
- Whether collusion is success from the firms' point of view;
- Whether consumers can ever benefit from firms' collusion;
- Whether collusion completely eliminates uncertainty;
- The meaning of the public interest;
- Different forms of collusion may have different public interest implications;
- Relevant application of economic models e.g. prisoners' dilemma model (game theory);
- Market failure versus government failure.

**Use the Levels mark scheme described earlier.**

**MAXIMUM FOR 2 (b) = 30 MARKS**

**TOTAL FOR QUESTION 2 = 50 MARKS**

3

In 2001, the Office of Electricity and Gas Markets (OFGEM) announced that it would no longer impose controls on the prices that gas and electricity companies can charge. However, it would continue to monitor the way the companies set prices.

<p>3 (a) Explain the economic reasons why UK governments set up agencies such as OFGEM to regulate privatised industries. <span style="float: right;"><i>(20 marks)</i></span></p>
--

For candidates who:

state that OFGEM etc. are regulatory agencies **2 marks**

state that prior to privatisation, the industries were state monopolies **2 marks**

state that monopolies may undertake monopoly abuse **2 marks**

provide relevant explanation of how a monopoly may abuse its market power **up to a further 8 marks**

state the general point that a reason for creating the regulatory agencies is to prevent or constrain abuse by a privatised monopoly **3 marks**

state a particular economic reason for setting up a regulatory agency e.g. to protect consumers, to prevent the price charged from rising, to reduce entry barriers, to make the market contestable, to reduce abnormal profit, to promote economic efficiency: **3 marks for stating a reason**

provide explanation of a reason **up to 5 further marks per reason**

provide evidence for particular industries or regulators **up to 5 marks**

make any other relevant point e.g. the case for the RPI -X price control **up to 4 marks per point**

**Maximum of 10 marks if answer is restricted to explanation of abuse by state monopolies**

**Maximum of 10 marks for explanation of reasons for regulation unrelated to privatised industries**

**MAXIMUM FOR 3 (a) = 20 MARKS**

3 (b) Discuss the case **for** and **against** removing controls on the prices charged by gas and electricity companies. *(30 marks)*

An answer that goes no further than discussing either the case for *or* the case against removing controls imposed on gas and electricity companies cannot go beyond Level 2. Explanation/analysis of both the case for and the case against is needed to reach Level 3, and some evaluation building on the analysis is required to score 18 marks or higher (Level 4). Candidates may argue that the ‘case for’ is stronger than the ‘case against’, or vice versa, or that ‘it all depends’, but in each case to reach Level 5 the argument must be fully justified.

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.

Issues and areas for discussion include:

- Forms of price control such as rate of return regulation and RPI-X;
- Relating the case against removing controls to relevant economic theory: monopoly abuse, efficiency arguments etc.;
- Relating the case against removing controls to the existence of barriers to entry, and the lack of sufficient contestability etc.;
- Relating the case for removing controls to problems of regulation: regulatory capture, information problems etc.;
- Use of evidence from the experience of privatisation, regulation and deregulation;
- Consideration of the watchdog role of the agencies;
- Relevant discussion of other governmental organisations: the Competition Commission and the OFT;
- Market failure versus government failure.

**Use the Levels mark scheme described earlier.**

**MAXIMUM FOR 3 (b) 30 MARKS**

**TOTAL FOR QUESTION 3 = 50 MARKS**

4

- 4 (a) Cost-benefit analysis is sometimes used to evaluate major investment projects such as the proposed fifth terminal at London Heathrow airport. Explain the factors that are likely to be taken into account when undertaking such a cost-benefit analysis. *(20 marks)*

For candidates who:

- |   |                              |
|---|------------------------------|
| state that CBA is a technique used to evaluate economic policies or decisions   | <b>2 marks</b>               |
| state that CBA has often been used to evaluate big investment projects  | <b>2 marks</b>               |
| state that CBA takes account of all the costs and benefits  | <b>2 marks</b>               |
| state the identity: social costs = private costs + external costs   | <b>2 marks</b>               |
| state the identity: social benefits = private benefits + external benefits  | <b>2 marks</b>               |
| state that CBA takes account of private costs   | <b>2 marks</b>               |
| explain the meaning of private costs  | <b>up to 2 further marks</b> |
| provide an example of a private cost  | <b>1 mark</b>                |
| develop the example of a private cost   | <b>1 further mark</b>        |
| state that CBA takes account of external costs  | <b>2 marks</b>               |
| explain the meaning of external costs   | <b>up to 2 further marks</b> |
| provide an example of an external cost  | <b>1 mark</b>                |
| develop the example of an external cost   | <b>1 further mark</b>        |
| state that CBA takes account of private benefits  | <b>2 marks</b>               |
| explain the meaning of private benefits   | <b>up to 2 further marks</b> |
| provide an example of a private benefit   | <b>1 mark</b>                |
| develop the example of a private benefit  | <b>1 further mark</b>        |
| state that CBA takes account of external benefits   | <b>2 marks</b>               |
| explain the meaning of external benefits  | <b>up to 2 further marks</b> |
| provide an example of an external benefit   | <b>1 mark</b>                |
| develop the example of an external benefit  | <b>1 further mark</b>        |
| explain any other relevant factor to be taken into account e.g. method of measurement, the need to take account of future as well as current factors, need to draw the line on what to include and exclude etc. | <b>up to 4 marks each</b>    |

**Maximum of 10 marks for a list of costs and benefits to be taken into account, with no explanation**

**Maximum of 8 marks if only private costs and benefits are explained**

**Maximum of 14 marks if private costs and benefits are not explained**

**Maximum of 10 marks if a distinction is not clearly made between private and external costs and/or benefits**

**MAXIMUM FOR 4 (a) = 20 MARKS**

- 4 (b) There are many problems encountered when undertaking a cost-benefit analysis of major projects such as a new airport terminal. Evaluate the view that, as a result, cost-benefit analysis is of little value when it comes to decision-making. *(30 marks)*

An answer that goes no further than identifying problems cannot go beyond Level 2. Explanation/analysis is needed to reach Level 3, and some evaluation building on the analysis is required to score 18 marks or higher (Level 4). Candidates may argue that the CBA is of little use, or of great use, or that 'it all depends', but in each case to reach Level 5 the argument must be fully justified.

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.

Issues and areas for discussion include:

- Identification of particular problems;
- Explanation of identified problems;
- Problems of identification;
- Problems of measurement and quantifying external costs and benefits;
- Problems of measuring and quantifying future costs and benefits;
- Problems of where to draw the line between inclusion and exclusion;
- Problems of value judgement;
- The political purpose of CBA;
- Problems caused by delay in decision making;
- Use of evidence;
- The pseudo-scientific nature of CBA.

**Use the Levels mark scheme described earlier.**

**MAXIMUM FOR 4 (b) = 30 MARKS**

**TOTAL FOR QUESTION 4 = 50 MARKS**