GradeMax

Cambridge Assessment International Education

Cambridge IGCSE™

ECONOMICS **0455/21**

Paper 2 Structured Questions **May/June 2023**

MARK SCHEME

Maximum Mark: 90

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the May/June 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

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GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Social Science-Specific Marking Principles (for point-based marking)

1 Components using point-based marking:

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

a DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
b DO credit alternative answers/examples which are not written in the mark scheme if they are correct
c DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons …).
d DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
e DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
f DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
g DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

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2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

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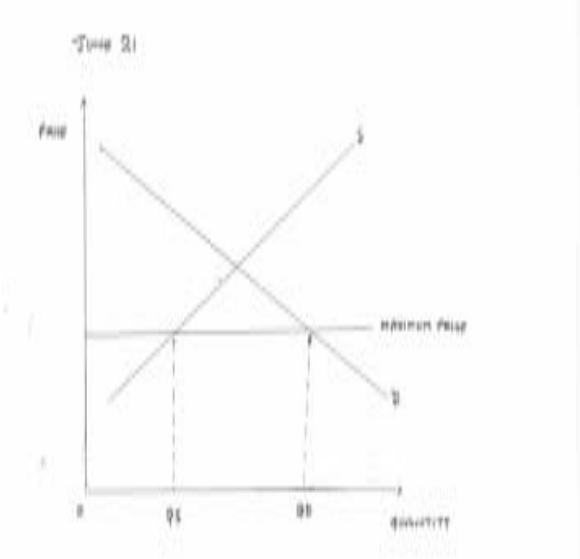
Common examiner annotations on 0455/2281/0987 and 2286

	Uncertain what the candidate means – an illogical line of thought		MAX	MAX
BOD	Benefit of the doubt		NAQ	Not answered question
BP	Blank page		NE	Not established – a statement made without any support
	Caret – a word is missing.		REP	Repetition
CON	Confused		SEEN	SEEN
	Cross			Tick – a credit worthy point
	Highlight		TV	Too vague
L	Nothing creditworthy			
L1	Level 1			
L2	Level 2			
L3	Level 3			

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Question	Answer	Marks	Guidance
1(a)	**Calculate Australia's unemployment rate in 2021.** 4%	**1**	0.56 / 14 × 100 Allow 4 without percentage
1(b)	**Identify <u>two</u> substitutes for coal.** Two from: • gas • offshore wind / wind power • solar power / panels	**2**	
1(c)	**Explain <u>one</u> economy of scale that could benefit a coal-mining firm.** Managerial / labour economy (1) employing specialist workers e.g. mining engineers (1). Technical economy (1) employing efficient / technologically advanced equipment e.g. drones (1). External economy of scale (1) example e.g. skilled labour force (1).	**2**	One mark for the economy of scale identified and one mark for an explanation.
1(d)	**Explain <u>two</u> influences on the price elasticity of supply of coal.** Storage time (1) expensive to store so inelastic supply (1). Construction of new mine / production time (1) takes a long time, so inelastic supply (1). Stocks (1) may make supply elastic (1).	**4**	One mark each for each of two influences identified and one mark each for each of two explanations.

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Question	Answer	Marks	Guidance
1(e)	**Draw a demand and supply diagram to show how setting a maximum price below the equilibrium price will affect a market.** Demand and supply diagram: Axes correctly labelled – price and quantity or p and q (1). Demand and supply curves correctly labelled (1). Price line set below the equilibrium (1). Demand shown as greater than supply (1) e.g. has the two dotted lines downwards (it does not have to be labelled Qs and Qd).	4	 **Note:** Accept unlabelled price line / line drawn only to demand curve. Accept shortage if correctly identified on the diagram. Do not accept demand greater than supply if demand and supply curves are incorrectly drawn

Question	Answer	Marks	Guidance
1(f)	**Analyse whether large coal-producing countries are likely to be net exporters of coal.** Coherent analysis which might include: Expected outcome: Large coal producing countries may have a surplus to sell / may have grown their production in order to sell abroad (1) most of the evidence supports this relationship (1) Supporting evidence: Five of the seven countries consume less coal than they produce (1) calculation e.g. US could have exported 11 million tonnes / Australia could have exported 394 million tonnes or simply the difference (1). Analysis: Countries that produce more coal than they consume may benefit from economies of scale / can export because their prices are low (1). Exceptions: China or India are an exception (1) as they consumed more coal than they produced (1). Analysis: they may have been net importers (1) since had used up stocks of coal / need more energy as a developing country (1) may not be able to export coal if world demand for coal is low / countries may both import and export coal (1).	**5**	Responses do not have to be in the format suggested but they should address the expected / normal outcome, offer supporting evidence of that, highlight any exceptions to that, and analyse the overall data.

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td>1(g)</td><td>Discuss whether or not an increase in the size of its coal industry will benefit the Australian economy.

Award up to 4 marks for logical reasons why it might, which may include:
• may increase GDP / economic growth (1) increasing living standards / raise incomes / reduce poverty (1)
• may reduce unemployment (1) structural unemployment (1)
• may improve current account position / have a surplus (1) as Australia seems to be a net exporter of coal (1)
• may increase tax revenue (1) increasing government's ability to spend (1)
• economies of scale (1) result in lower prices for households and industries (1).

Award up to 4 marks for logical reasons why it might not, which may include:
• may increase pollution (1) lowering living standards / cause health issues (1) reduce tourism / negative impact on current account (1)
• other forms of power may not be developed (1) example (1)
• some workers may leave other jobs (1) these jobs may have better working conditions (1)
• coal mining is a relatively dangerous industry (1) so life expectancy may be reduced / creates chronic illnesses / workers unable to work (1).
• Global demand for coal may fall (1) impact upon Australia e.g. unsold stock (1).
• May rapidly deplete stocks (1) leading to lower exports (1) and less employment (1).</td><td>6</td><td>Apply this example to all questions with the command word DISCUSS (1g, 1h, 2d, 3d, 4d and 5d)

Each point may be credited only once, on either side of an argument, but separate development as to how/why the outcome may differ is rewarded.

<table><tr><th>Generic example</th><th>Mark</th></tr><tr><td>Tax revenue may decrease …</td><td>1</td></tr><tr><td>… because of reason e.g. incomes may be lower.</td><td>1</td></tr><tr><td>Tax revenue may increase because incomes may be higher i.e. reverse of a previous argument.</td><td>0</td></tr><tr><td>Tax revenue may increase because of a different reason i.e. <u>not</u> the reverse of a previous argument e.g. government spending on subsidies may stimulate the economy more than spending on education.</td><td>1</td></tr></table></td></tr>
</table>

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Question	Answer	Marks	Guidance
1(h)	**Discuss whether or not Australia is likely to have a budget deficit in 2026.** Award up to 4 marks for logical reasons why it might, which may include: • unemployment is forecast to increase (1) so there may be more government spending on unemployment benefits (1) less income tax revenue (1) • there may be more government spending on retraining unemployed workers (1) • some of the rise in population may result in more government spending (1) e.g. on pensions / healthcare / education (up to 2 marks) • budget deficit in previous years (1) would mean interest would have to be paid on the debt that has built up (1). Award up to 4 marks for logical reasons why it might not, which may include: • population and the labour force are forecast to increase (1) so there may be more taxpayers / fewer claiming benefits (1) • tax revenue may rise (1) due to higher profits / higher tax rates (1) • GDP is forecast to increase (1) more people in work (1) which would be likely to increase direct and indirect tax revenue (1) • state support for industries may fall (1) may have been high in 2021 due to Covid-19 (1).	**6**	

Question	Answer	Marks	Guidance
2(a)	**Identify <u>two</u> functions of money.** Two from: • Medium of exchange • Unit of account / measure of value • Store of value • Standard of deferred payments	**2**	**Note:** a description of the function, without the term, gets a mark e.g. money can be used to buy and sell products, may be used to trade. Nothing for characteristics of money. If more than two functions are given, consider the first three.
2(b)	**Explain how improved education may affect the demand for cigarettes and for fresh fruit.** Logical explanation which might include: It may reduce demand for cigarettes (1) people may be better informed about harmful effects / cigarettes are a demerit good (1). It may increase demand for fresh fruit (1) people may be better informed about beneficial effects / fresh fruit is a merit good / may gain better paid jobs and so able to afford fresh food (1).	**4**	Only accept demand for cigarettes may increase if linked to higher income (resulting from improved education). One mark for each of two reasons identified and one for each of two explanations.

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Question	Answer	Marks	Guidance
2(c)	**Analyse the causes of an increase in a government's tax revenue.** Coherent analysis which might include: Tax revenue is government income / part of government fiscal policy (1) which can be spent on government objectives e.g. education (1) Increase in employment (1) increase in income (1) More convenient (1) easier to pay (1) and collect the tax (1) higher income tax revenue (1) Increase in spending (1) higher indirect tax revenue (1) Increase in profits (1) higher corporation tax (1) Increase in population (1) more people to pay taxes (1) Change in tax rates (1) higher tax rates can increase revenue without a change in income / spending / profits (1) lower tax rates may reduce tax avoidance / evasion (1) increase incentives (1) Greater efficiency in tax collection (1) reduction in corruption / simpler forms (1) Wider tax base (1) more products / more people taxed (1) Increase in imports (1) higher revenue from tariffs (1).	**6**	

Question	Answer	Marks	Guidance
2(d)	**Discuss whether or not an increase in unemployment benefit payments would reduce poverty.** In assessing each answer, use the table opposite. Why it might: • raise incomes of those on low incomes • may enable them to buy more basic necessities • may reduce absolute poverty • may increase total demand • higher total demand may reduce unemployment • Also enable them to seek education / become more employable Why it might not: • may be a disincentive to find employment • people may become dependent on benefits • will not help all those on low incomes e.g. the retired and the sick • may not reduce relative poverty • some of the unemployed may not claim benefits • opportunity cost – government could spend on e.g. education which might be more effective. • Size of unemployment benefit may be small and may be less than inflation	8	See table below

Level	Description	Marks
3	A reasoned discussion which accurately examines both sides of the economic argument, making use of economic information and clear and logical analysis to evaluate economic issues and situations. One side of the argument may have more depth than the other, but overall, both sides of the argument are considered and developed. There is thoughtful evaluation of economic concepts, terminology, information and / or data appropriate to the question. The discussion may also point out the possible uncertainties of alternative decisions and outcomes.	6–8
2	A reasoned discussion which makes use of economic information and clear analysis to evaluate economic issues and situations. The answer may lack some depth and development may be one-sided. There is relevant use of economic concepts, terminology, information and data appropriate to the question.	3–5
1	There is a simple attempt at using economic definitions and terminology. Some reference may be made to economic theory, with occasional understanding.	1–2
0	A mark of zero should be awarded for no creditable content.	0

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Question	Answer	Marks	Guidance
3(a)	**Identify <u>two</u> reasons why death rates may vary between countries**. Two from differences in: • income / standard of living • healthcare • education • nutrition • lifestyles / suicide rates • average age • spread of Covid / infectious diseases • war / conflict • natural disasters • air pollution / water pollution • conditions of work • level of crime	**2**	Do not accept differences in population size as these affect number rather than rate. If more than two reasons are given, consider the first three.
3(b)	**Explain <u>two</u> causes of an increase in the size of a country's labour force.** Logical explanation which might include: Change in the birth rate (1) rise will mean more people of working age in the long run / fall will enable more parents to be in the labour force (1). Immigration (1) many immigrants are of working age (1). Rise in retirement age (1) people will work for longer (1). Fall in school leaving age (1) people will be in education for a shorter period (1). Fall in the death rate / rise in life expectancy (1) fewer people dying before reaching retirement age (1). Changes in social culture (1) allowing more women to work (1). Increase in size of population of working age (1) reason (1). Rise in wage levels (1) attracts people to re-enter the labour market (1).	**4**	One mark each for each of two causes identified and one mark each for each of two explanations.

Question	Answer	Marks	Guidance
3(c)	**Analyse how an increase in labour productivity in a country can increase a surplus on the current account of its balance of payments.** Coherent analysis which might include: Output per worker (hour) increases (1) may reduce average cost of production (1) lower prices (1) may increase the quality of exports (1). These changes may increase international competitiveness of exports / make exports cheaper (1) demand for exports may increase (1) export revenue may rise (1). Higher relative prices of imports (1) lower relative quality of imports (1) these changes may decrease international competitiveness of imports (1) demand for imports may decrease (1) import expenditure may fall (1). Output increases (1) allowing more exports (1) and less imports (1).	**6**	

Question	Answer	Marks	Guidance
3(d)	**Discuss why some countries may experience lower inflation in the future and some may not.** In assessing each answer, use the table opposite. Why some might: • advances in technology may reduce costs of production • increases in education and healthcare could raise labour productivity • globalisation may increase international competition • trade union power may fall, lowering wage increases • successful government policy measures e.g. reducing demand Why some might not: • consumers may become optimistic and spend more • governments may increase their spending • the rate of interest may fall • total demand may increase • raw materials may run out • rising cost of energy and rising food prices.	8	See table below

Level	Description	Marks
3	A reasoned discussion which accurately examines both sides of the economic argument, making use of economic information and clear and logical analysis to evaluate economic issues and situations. One side of the argument may have more depth than the other, but overall, both sides of the argument are considered and developed. There is thoughtful evaluation of economic concepts, terminology, information and / or data appropriate to the question. The discussion may also point out the possible uncertainties of alternative decisions and outcomes.	6–8
2	A reasoned discussion which makes use of economic information and clear analysis to evaluate economic issues and situations. The answer may lack some depth and development may be one-sided. There is relevant use of economic concepts, terminology, information and data appropriate to the question.	3–5
1	There is a simple attempt at using economic definitions and terminology. Some reference may be made to economic theory, with occasional understanding.	1–2
0	A mark of zero should be awarded for no creditable content.	0

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Question	Answer	Marks	Guidance
4(a)	**Identify <u>two</u> influences on which country a person decides to work in.** Two from: • wages / GDP per head • working conditions • job opportunities / job security • qualifications required • family ties • language spoken • immigration restrictions • personal safety/ freedom from persecution • living standards / cost of living • better welfare / healthcare / education provision	**2**	If more than two influences are given, consider the first three.
4(b)	**Explain, with examples, the difference between a merit good and a public good.** Logical explanation which might include: A merit good e.g. education / fruit (1) is beneficial / is under-consumed / people unaware of benefits / so underproduced without government intervention / government encourage consumption (1). A public good e.g. defence / streetlighting / police / sea defences / roads (1) would not be produced by the private sector / needs to be financed by the government/ non-rival/ non-excludable (1).	**4**	One mark each for each of two differences identified and one mark each for each of two examples

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Question	Answer	Marks	Guidance
4(c)	**Analyse how an increase in government spending could increase life expectancy.** Coherent analysis which might include increased government spending on: Healthcare (1) could raise quality / accessibility of healthcare (1). Education (1) may result in people leading healthier lives (1) more exercise (1) better nutrition (1). Benefits (1) may increase access to basic necessities / reduce poverty (1). Green energy (1) may reduce pollution (1). Infrastructure (1) could reduce traffic accidents (1) reduce traffic congestion (1) reduce stress (1). Police (1) reduces deaths through crime (1). Increased government spending (in total) (1) may increase employment / raise income / raise standards of living (1).	**6**	MAX of three marks for just identifying areas of government spending MAX of three marks for analysis of any single area of spending. One item analysed well MAX 4 marks.

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Question	Answer	Marks	Guidance
4(d)	**Discuss whether or not a rise in a country's foreign exchange rate would benefit its economy.** In assessing each answer, use the table opposite. Why it might: • reduce price of imports • this could lower inflation as raw material costs may fall and more competitive pressure for firms to keep price rises low • enables a country to buy more imports for any given quantity of exports • could reduce a current account surplus which may enable more products to be consumed. Why it might not: • increase the price of exports • this could reduce exports and export revenue • economic growth could fall • unemployment could rise • could increase a current account deficit.	8	See table below

Level	Description	Marks
3	A reasoned discussion which accurately examines both sides of the economic argument, making use of economic information and clear and logical analysis to evaluate economic issues and situations. One side of the argument may have more depth than the other, but overall, both sides of the argument are considered and developed. There is thoughtful evaluation of economic concepts, terminology, information and/or data appropriate to the question. The discussion may also point out the possible uncertainties of alternative decisions and outcomes.	6–8
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Question	Answer	Marks	Guidance
5(a)	**Identify <u>two</u> reasons why rich households spend more than the average household.** Two from: • higher incomes • find it easier to borrow • more confidence • more savings / more wealth • high cost of luxury goods and services • maintaining / showing status • rich households may choose to have large families	**2**	If more than two reasons are given, consider the first three.
5(b)	**Explain the significance of a production point inside a PPC and a production point on its PPC.** Logical explanation which might include: A point inside a PPC means output is lower than potentially achievable (1) there are unemployed resources / there is inefficient use of resources (1). A point on a PPC means output is at its maximum (1) all resources are employed / full employment / there is efficient use of resources (1). A production point shows a combination of goods produced (1) example e.g. X capital goods and Y consumer goods (1).	**4**	One mark each for each of two significances identified and one mark each for each of two explanations.

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Question	Answer	Marks	Guidance
5(c)	**Analyse why someone who has been unemployed for more than a year may not get another job.** Coherent analysis which might include: May lose skills (1) qualifications may become out of date (1) may experience ill-health (1) lack of recent job experience (1) high cost of retraining (1) may become less attractive to employers (1). Skills may be outdated (1) industry in decline (1) will need retraining (1). Economy could be in recession (1) with high number of people unemployed and few vacancies (1). May lose confidence / become discouraged / depressed (1) put less effort into finding another job (1). Unemployed workers may be occupationally immobile (1) geographically immobile (1). Unemployment/welfare benefits may be high (1) may be above low wages / maybe sufficient to live on (1). May face discrimination (1) on grounds of e.g. age (1). May retire (1) and leave the labour force (1).	**6**	

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<tr><td>5(d)</td><td>Discuss whether or not a government should encourage firms to merge.

In assessing each answer, use the table opposite.

Why it should:
• may result in economies of scale
• lower average costs of production
• lower prices for consumers
• raise quality of products
• increase international competitiveness and improve current account
• improved performance may increase profits and corporation tax

Why it should not:
• may result in diseconomies of scale
• may increase monopoly power / reduce competition
• raise prices
• may reduce innovation
• rationalisation may result in some workers losing their jobs
• should be left to market forces to decide.</td><td>8</td><td>
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