ECONOMICS **9772/03**

Paper 3 Investigation **May/June 2023**

MARK SCHEME

Maximum Mark: 40

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.

This document consists of **22** printed pages.

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.

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)
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.

ANNOTATIONS

The following annotations are used in marking this paper and should be used by examiners wherever appropriate.

Annotation	Use or meaning
L1, L2, L3, L4	Level seen or awarded
N0, N1, N2, N3	Evaluatio**n** band seen or awarded
KU	Relevant economic knowledge and understanding used to help answer the question here (see AO1)
APP	Relevant application of economic concepts to the given question or context is shown here (see AO2)
AN	Relevant economic analysis of the situation in the question is demonstrated (see AO3)
EE	Relevant, effective evaluation of the issues in the question is given here (see AO4)
✓	Correct and relevant point made in answering the question
BOD	Benefit of the doubt given. The point has not been made quite correctly, completely or precisely, but is nearly there and the intention is clear
^	Omission mark. A term, a label, a line on a graph, an example, etc, required to make the point correctly has been missed out of the response
×	Incorrect point or error made
TV	Too vague. This part of the response is not precise enough to be worth any credit
?	The point being made is unclear or confused
IR	Irrelevant response – this work is not helping the candidate to answer the given question
SEEN	This work has been noted by the examiner, but there is nothing of any credit here
highlighter	Used to indicate something of significance or referred to by another annotation or comment
[T] (text box)	A catch-all, when you need to give more detail or explanation. For the Essay there may be a requirement to show part marks in a text box – see the detailed mark scheme
REP	Repetition of a point already made/credited
OFR	Own figure rule

Question	Answer	Marks
1	**Transport and the Environment** **To what extent are the UK government's transport policies incompatible with meeting its environmental targets?** Candidates should be able to explain both recent UK government transport policies and its environmental goals. The wide-reaching nature of the transport sector should be recognised. Candidates should therefore consider different modes of transport by which passengers and freight achieve mobility. It should also be recognised that transport can be achieved via land (road, rail and pipelines), water (sea and inland waterways) and air. The question is clearly evaluative, and candidates are expected to make a judgement about whether the UK government's transport policies are compatible with meeting its environmental targets. UK government policies might include: • transport by land including road building programmes, buses, cycling routes, pedestrianisation,HS2 and electrification of rail, capacity issues • transport by water including domestic water transport system, use of fuel, legacy of BREXIT, best practice and adoption of new technology • transport by air including business and leisure air travel, frequent flyer policies, carbon offsetting, staycations Analysis may be assisted by use of diagrams. Answers may include: Knowledge and understanding of the types of transport policy and its impacts on different modes of transport and different types of economic agent. Knowledge and understanding of environmental targets and which are impacted by different forms of transport. Examples: • Current government transport policies and their likely impact on the environment i.e. which might worsen, and which might improve the environment. • Current government environmental targets and which are achievable through transport policies. • Ways in which transport policy aims to ensure environmental protection e.g. carbon-offsetting, road pricing and other price-related policies (fuel taxes), low emissions zones, diesel scrappage schemes, electric road vehicles, promotion of public transport, rail electrification etc. • Ways in which different economic agents/stakeholders (consumers and producers) might be targeted e.g. should an airline or a passenger be responsible for carbon-offsetting? Voluntary or compulsory? Does the government or private producers fund R&D? Analysis of the way in which transport policy affects the environment and how this may harm or help alternative government or transport company objectives. Analysis of government environmental objectives and transport policies to achieve these objectives.	**40**

Question	Answer	Marks
1	Analysis points could include: • Standard externality and imperfect information effects of transport that demand greater environmental protection • Ways in which transport policy contributes to or reduces environmental damage/protection • The negative impacts environmental protection could have on other objectives – drag on growth, higher costs of production, loss of investment and FDI, reduced competitiveness, inefficiencies from compliance and enforcement, reduced consumer surplus / choice • The ways in which environmental targets may contribute to or limit the achievement of other objectives – improved productivity, long term health benefits reducing pressures on the NHS and the budget deficit, attraction of inward investment, lower long-term costs of production and efficiency savings, higher employment in industries that develop to improve environmental protection. Evaluation of whether transport policy is incompatible with environmental targets. Lower-level evaluation will evaluate individual transport policies and their impact on the environment rather than taking a synoptic approach. Candidates may disaggregate different aspects of transport policy and different methods of environmental protection. Evaluation points may include: • The time frame under consideration • The practical difficulties of achieving transport policy objectives while meeting environmental targets • Policy conflicts and trade-offs • The impact on different stakeholders	

Question	Answer		Marks
1	**Theory and Analysis**		
	Level 4 (18–22 marks) Mid mark 20	In this level candidates are clearly able to demonstrate a clear understanding of transport policies and how that might be to the detriment of other policies aimed at achieving environmental targets. There will be in-depth analysis which will show good independent research to support their points, particularly with reference to examples of how transport policy could be considered to be aiming at environmental protection. The best candidates may attempt to disaggregate the concept of environmental protection to look at different priorities within this broad concept.	
	Level 3 (12–17 marks) Mid mark 15	In this level, a clear attempt is made to answer the specific question set in terms of how transport policies may affect environmental targets. Links between the question being asked and the perspective being put forward are clear. Relevant supporting data and diagrammatical analysis are clearly evident. Use of economic theory, terminology and application is correct and regular, though may contain some errors at times. There is some attempt to use independent research to support their points but at the lower end this may be more superficial and unsubstantiated. A range of perspectives is discussed but may lack critical awareness at times, for example, candidates at the lower end. At the lower end of this level, candidates must still address the link between transport policy and the policy objective of environmental protection, although the analysis to support the discussion may be limited. The candidate may lack breadth by adopting generalisations about transport, discussing a narrow range of modes or policies. The debate may lack sophistication for example, assuming that transport policy doesn't consider environmental protection.	
	Level 2 (6–11 marks) Mid mark 9	At the top end of this level, a generalised attempt to answer the question has been made but candidates fall short on critical awareness or current context. They may make only a superficial attempt to answer the specific question set – in this case, they fail to focus on the link between transport policy and environmental targets – instead, they focus solely on proposing and evaluating policies with the impact on objectives only made superficially. They may explain the varying objectives of pollution-reduction policies without clearly analysing how these are applied to different modes of transport. At the mid-bottom of this level, the answer will either lack contextual awareness and supporting evidence and/or read like a Paper 2 theoretical response.	
	Level 1 (1–5 marks) Mid mark 3	There is a lack of understanding of transport policies or of environmental targets. The policies are likely to be listed rather than explained and there will no appreciation of the impact on different transport modes or stakeholders.	

Question	Answer		Marks
1	**Evaluation**		
	Level 3 (13–18 marks) Mid mark 16	Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this Level, there will be signs of real in-depth research and/or originality. In all cases there will be a clear conclusion - that is substantiated - at the end that relates specifically to the set question, even if the conclusion is that it is difficult to know whether transport policy prevents the achievement of environmental targets.	
	Level 2 (7–12 marks) Mid mark 10	At least two relevant issues will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification. Conclusions may do little more than sit on the fence.	
	Level 1 (1–6 marks) Mid mark 4	Some of the issues that could be open to evaluation may be introduced into the discussion but there is no attempt to go further than to show an appreciation of the issue – for example, 'transport policy is aimed at increasing road traffic use and hence damage the environment'. There is no attempt to draw together the relevant issues in a conclusion.	

Question	Answer	Marks
2	**China and the Global Economy**	**40**
	'China has been steadily intensifying its economic and strategic relations with low-income countries in recent years. By deepening trade ties and large-scale infrastructure financing through projects such as the Belt and Road Initiative, China has become an important 'donor' to low-income countries.' (Helena Vieria)	
	To what extent has China's approach to its economic and strategic relations with low-income countries improved the likelihood of both China and the global economy achieving their economic objectives?	
	Candidates should clearly explain China's approach to low-income countries which should show an understanding of its Belt and Roads Initiative which is aimed at improving connectivity. This may explore whether this approach is for the benefit of China, for low-income economies and for the global economy.	
	Equally, the question invites candidates to demonstrate their independent research into China's impact on low-income countries and vice versa. This should include the potential impact on the global economy of China's large-scale infrastructure financing in low-income economies.	
	Good candidates will see that the question invites an opportunity to consider the impact on China, low-income countries and the global economy. As a result, the positive and negative impacts on China, low-income countries and the global economy will be considered. For example, there should be a recognition that in recent years many of these contracts have been renegotiated as the loans have led low-income economies to suffer from an increasing debt burden.	
	Better candidates are likely to consider wider implications, such as whether the induced growth is sustainable and inclusive. Candidates should recognise that while China has been accused of building coal-powered electricity generating stations it has also been credited with developing and building renewable energy plants. The decision to build coal-powered generating stations may have been made by the low-income country and not imposed on the country by China. Recent events have also seen China being more prepared to meet its obligation for reducing carbon emissions.	
	They should use appropriate analytical tools and data to support their arguments. They should be able to come to a clear and supported conclusion on the extent to which the approach taken by China improves the economic goals for China, low-income countries and / or the global economy.	
	Answers may include:	
	Knowledge and **understanding** of China's approach to low-income countries (e.g. the Belt and Roads Initiative). This may include how the investment is financed, its connectivity aims and whether the building of infrastructure benefits or harms low-income economies.	

Question	Answer	Marks
2	Examples: • The elements of China's Belt and Roads Initiative. • The use of local resources and impact on trade. • Funding/indebtedness issues • Sustainability and inclusive growth issues **Application** of different aspects of this 'Belt and Roads' approach to low-income countries. There is significant scope for candidates to provide a variety of examples from their research into China's impact on the global economy (and vice versa). Candidates will be rewarded by using the application to different sectors and a recognition that different sectors and regions of the economy will be affected. The different types of infrastructure development might be considered i.e. transport infrastructure, exploitation of mineral resources, renewable versus non-renewable energy production, education and clean water production. The application to wider trade relationships may also be developed. Examples: • How are the benefits of the infrastructure spending to be shared between China and the low-income countries? • How will the benefits impact on the global economy? • Threats to the low-income countries caused by the funding approach and potential debt crises. • How sustainable is this infrastructure spending? **Analysis** of the impact of this policy on both China, low-income countries and the global economy. This might be in terms of the impact on employment, inflation, growth and the balance of payments. Candidates should be rewarded for supporting their analysis with diagrams. Good candidates will be able to illustrate their points with specific contexts and supporting data. To reach higher levels of analysis candidates must analyse the impact on different sectors of the economy and on a range of economies across the world. Examples of analytical points: • Analysis of China's trade policy • Impact of funding arrangements / debt management • Links to growth in both China and low-income countries • Analysis of the impact on the global economy • Barriers to growth **Evaluation** should be primarily around the extent to which China's approach would allow low-income countries, China and the global economy to achieve their development goals.	

Question	Answer	Marks
2	At the lower end, candidates are likely to be limited in their outlook and restrict their evaluation to generalised statements about trade policy. Weaker candidates will fail to consider the impact of the specific Belt and Roads Initiative on low-income countries or China. At higher levels candidates will recognise that China's Belt and Roads Initiative is multi-faceted and will impact differently on both China and different types of low-income country which may also include location. These impacts will also feed through to the global economy and candidates should be rewarded for assessing the wider impacts of these initiatives. Good evaluation will involve candidates looking at different impacts of China's trade policy. Strong candidates will be able to refer to multiple examples when making a judgement on the impact on China and its trading partners. Strong evaluation will come to a summative conclusion about whether and the extent to which these policies will affect China's relations with low- income countries. It should also be forward-looking. Possible evaluation points: • Is the policy beneficial or harmful to the low-income countries? • Is the policy beneficial or harmful to the global economy? • Judgements about the extent to which China benefits from the policies • Judgements about the extent to which low-income countries will suffer from long-term debt issues • To what extent will the policy be sustainable? **Theory and analysis**	

Level 4 (18–22 marks) Mid mark 20	In this level, the answer shows a thorough understanding of the potential impact of China's approach to its economic and strategic relations with low-income countries. There will be in-depth analysis which links the policy to both China and the low-income countries. At the top end of this level, answers are able to show how changes can impact both on different sectors in the Chinese economy and on other low-income economies in different ways depending on the conditions present in an economy and their reliance on China for infrastructure development. The impact on the global economy should also be covered. There is clear evidence of independent research to support their points.

Question	Answer		Marks
2	Level 3 (12–17 marks) Mid mark 15	In this level, a clear attempt is made to answer the specific question set on the impact of China's approach to China, low-income economies and the global economy. There is a solid understanding of a range of different impacts on both China and low-income countries. A narrow focus on a single element would only achieve low level 3 if it is covered in significant depth. There is relevant supporting data and diagrammatical analysis. Use of economic theory, terminology and application is correct and regular, though may contain some errors at times. There is a reasonable attempt to use independent research to support their points but at the lower end this may be more superficial and unsubstantiated. Broad coverage of the impacts on China on low-income countries may be constrained by a lack of critical awareness or narrow range of application to other economies and / or the global economy. At the lower end of this level, candidates may lack critical awareness into the nature and characteristics of the growth process and may make broad generalisations about the impact on China, low-income countries and the global economy. There must be an attempt made to examines the impacts on at least two of the following: China, low-income economies and the global economy to enter Level 3. Independent research to support their points will be superficial at the lower end.	
	Level 2 (6–11 marks) Mid mark 9	At the top end of this level, a generalised attempt to answer the question has been made but candidates fall short on critical awareness or current context. It is either a broadly theoretical essay or lacks contextual awareness. They may make only a superficial attempt to answer the specific question set. In this level candidates may be narrowly focused on low-income countries or on China or on the global economy or on the impact on a narrow range of sectors. There will be a description of the Belt and Roads initiative but application across different sectors and regions of the economy will lack critical awareness. Independent research to support their points will be superficial at the lower end.	
	Level 1 (1–5 marks) Mid mark 3	There is a lack of understanding of the Belt and Roads Initiative or the answer fails to make an attempt to apply the impacts of the initiative to either low-income countries, the global economy or to China.	

Question	Answer	Marks
2	**Evaluation** <table><tr><td>Level 3 (13–18 marks) Mid mark 16</td><td>Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this level, there will be signs of real in-depth research and/or originality. In all cases there will be a clear conclusion - that is substantiated - at the end that relates specifically to the set question. In this level evaluation must clearly judge the extent to which China's approach to its economic and strategic relations with low-income countries has improved the likelihood for China, low-income countries and the global economy achieving their economic development goals.</td></tr><tr><td>Level 2 (7–12 marks) Mid mark 10</td><td>At least two relevant issues will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification. Conclusions may do little more than sit on the fence.</td></tr><tr><td>Level 1 (1–6 marks) Mid mark 4</td><td>Some of the issues that could be open to evaluation may be introduced into the discussion but there is no attempt to go further than to show an appreciation of the issue – for example, 'China's approach will only benefit China at the expense of the low-income economies and the environment'. There is no attempt to draw together the relevant issues in a conclusion.</td></tr></table>	

Question	Answer	Marks
3	**The Sustainable Development Goals and the Post-2015 Development Agenda** **To what extent do you agree that the main barrier to achieving the Post-2015 Development Agenda has been financial constraints, but funding of a post-pandemic recovery gives a once-in-a-lifetime opportunity for all economies to achieve green and sustainable growth?** While knowledge of all potential barriers is not required for an exam of this length, the question requires students to be able to demonstrate a knowledge of a range of them. Better candidates will use their independent research to show a detailed knowledge of these barriers while also being able to give a broader answer to the question of whether funding to achieve a post-pandemic recovery gives a perfect opportunity to, in broad terms, achieve sustainable development goals. Weaker responses will only be able to talk about the constraints in very general and broad terms without exemplifying how a financial constraint prevents the achievement of the Post 2015 development agenda – such answers will be stuck in level 2 for theory and analysis. Good candidates will therefore use the words 'main barrier' to go beyond financial constraints and use this as a springboard to explore the debate around identifying the main barriers to achieving sustainable economic development. The best candidates will use their wider knowledge to consider whether the need to fund various projects in order to stimulate a post-pandemic recovery might be used to achieve green and resilient growth. These responses will question whether it is possible for ALL economies to be able to fund post-pandemic growth initiatives – whether green or otherwise. Weaker candidates will see this question as invitation to explain some barriers to achieving the Post-2015 Development agenda or will miss the opportunity to link to the post-pandemic recovery / economy stimulation packages that might be proposed by governments. These answers will read like a list of barriers and policies without an examination of the links between these measures and the Post-2015 Development Agenda. Better candidates will move from the barriers to a well-explained discussion about the options for stimulation packages and how these can be linked to sustainable growth. They should use appropriate analytical tools and data to support their arguments – use of economic nomenclature and economic theory will be key to differentiate candidates, that is, those who are able to elucidate clear arguments about the key barriers to achieving the post-2015 Development Agenda and macroeconomic stimulation policy options. Knowledge of sustainable development goals and the Post-2015 Development Agenda is expected, as well as the experience of specific noteworthy countries. They should reach a clear and well-supported conclusion on the extent to which this is achievable. Analysis may be assisted by use of diagrams.	**40**

Question	Answer	Marks
3	Answers may include: **Knowledge** and **understanding** of sustainable development goals, the Post-2015 Development Agenda and financial and other barriers to achieving them financial barriers and stimulation packages that might lead to a green and resilient growth. Examples: • Sustainable development goals • The Post-2015 Development Agenda • Financial Barriers • Other Barriers • Stimulation packages to achieve growth **Application** of government policies aimed at achieving green and resilient growth, of policies aimed at removing financial barriers, of barriers to a range of different types of economy. Examples: • Political barriers within different types of economy • Social barriers within different types of economy • Financial barriers within different types of economy • Economic growth policies that are sustainable • Targeting growth policies towards renewables • Targeting growth policies towards inclusivity • Targeting growth policies towards reductions in carbon emissions • Subsidies for Research and Development into recycling **Analysis** of the barriers to achieving the Post-2015 Development Agenda and the ability of governments to deliver sustainable growth. Examples: Barriers: • Effects of the pandemic on 'fiscal slack' • Political resistance to intervention • Social resistance to intervention Alternative/additional methods of macroeconomic stimulation: • Fiscal intervention • Market-based measures • Supply-side interventions • The role of aid / debt management **Evaluation** of whether financial barriers are the main barrier and of whether the need for post-pandemic stimulation packages is a once in a lifetime opportunity. At the lowest ends, the weakest candidates will not be able to offer any judgement on barriers or stimulation packages. Weaker candidates will also fail to make judgements on specific barriers but give generalised and poorly focused judgements.	

Question	Answer	Marks
3	Stronger candidates will not only consider which is the main barrier but also come to a well-reasoned summative conclusion about the use of post-pandemic stimulation packages. These will be set within a range of different types of economy. Examples of evaluation may include: • To what extent are financial barriers the main barrier? • Do the same barriers apply to all economies? • To what extent does funding of a post-pandemic recovery gives a once in a lifetime opportunity to achieve a green and resilient growth for all economies? **Theory and Analysis**	

Level 4 (18–22 marks) Mid mark 20	In this level, the response is clearly focused on the extent to which financial barriers are the main constraint to achieving the Post-2015 Development Goals. The extent to which funding of a post-pandemic recovery gives a once in a lifetime opportunity to achieve a green and resilient growth for ALL economies. At the top end of this level, development of points is thorough and detailed, with supporting evidence and data, incorporated within an answer with strong economic foundations. The use of theory and analysis is comprehensive, with almost flawless integration of the two into a clearly flowing essay. In this level, students are clearly able to move from the general understanding of barriers and alternative macroeconomic stimulation policies to ones specifically related to sustainable development goals. A strong appreciation of context is evident throughout the essay with supporting research being used to explain how governments are prevented from achieving development goals and how post-pandemic stimulation packages might help to achieve these aims.
Level 3 (12–17 marks) Mid mark 15	In this level, a clear attempt is made to answer the specific question set on whether financial barriers are the main constraint and whether post-pandemic stimulation packages give the opportunity to achieve green and resilient growth. Links between the question being asked and the perspective being put forward are clear. There is a solid understanding of a limited range of barriers or a broad discussion without exploring specific barriers preventing entrance into level 3. Relevant supporting data is evident throughout. Use of economic theory, terminology and application is correct and regular, though may contain some errors at times. A range of perspectives is discussed but may lack critical awareness at times e.g. the role of barriers may be generalised across countries. Evidence of independent research is clearly present though unsophisticated or undeveloped towards the lower end.

Question	Answer		Marks
3	Level 2 (6–11 marks) Mid mark 9	At the top end of this level, a generalised attempt to answer the question has been made but candidates fall short on critical awareness or current context. They may make only a superficial attempt to answer the specific question set – in this case, they fail to analyse the importance of financial barriers and stimulative macroeconomic policies, instead explaining barriers or a range of factors that prevent Post-2015 Development Agenda being achieved. It feels like a general answer on barriers or on the measures to achieve sustainable growth. Points made may be generalised whilst simultaneously being narrow in their analysis, for example, by generalising about low-income countries' governments and the contexts within which they work. Independent research may be significantly lacking.	
	Level 1 (1–5 marks) Mid mark 3	There is no understanding of barriers or of relevant macroeconomic stimulation packages.	

Evaluation

	Level 3 (13–18 marks) Mid mark 16	Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this level, there will be signs of real in-depth research and/or originality. In all cases there will be a clear conclusion drawn at the end that relates specifically to the set question – even if the conclusion is that the importance of financial barriers or in hindering the delivery of post-pandemic recovery may vary across countries.	
	Level 2 (7–12 marks) Mid mark 10	At least two relevant barriers and stimulation packages will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification. Conclusions may do little more than sit on the fence.	
	Level 1 (1–6 marks) Mid mark 4	Some of the issues that could be open to evaluation may be introduced into the discussion but there is no attempt to go further than to show an appreciation of the issue – for example, 'Financial barriers play a key role in preventing the achievement of the Post-2015 Development Agenda'. There is no attempt to draw together the relevant issues in a conclusion.	

Question	Answer	Marks
4	**Behavioural Economics and Government Policy**	**40**
	To what extent do you agree with the view that government policies to overcome market failures should be based on behavioural economics, implying that policies based on traditional economics are no longer sufficient?	
	The question is directed specifically to government policies that are focused on overcoming market failures. Candidates are expected to explain the reasons for market failures and compare the policies that might be adopted by behavioural economics and traditional economics under each of these types of market failure. There should be real-world applications to illustrate whether policies based on behavioural economics and traditional economics have succeeded or failed. The better responses will take this as an invitation to investigate whether behavioural economics offers the best approach to policy-making or whether there is still a role for policies based on traditional economics.	
	Good candidates will consider the main reasons why governments intervene in markets. This are expected to include at least two from public goods and quasi-public goods (with a good understanding of rival and excludable), externalities, imperfect information and equity. Better candidates will use their underlying research to demonstrate their knowledge and understanding of real-world occurrences of market failure and the policies that different governments have adopted to achieve a more efficient and equitable allocation of resources.	
	Traditional Economics is based on the assumption that individuals behave rationally, act in their self-interest, have perfect knowledge, and have clear objectives, such as utility maximisation and profit maximisation, when making decisions. Policies are derived from models that are based on these assumptions. Candidates should recognise that, in the real world, many of these assumptions are unlikely to be present.	
	Behavioural economics questions the assumptions of perfect knowledge, rational behaviour and self-interest. The approach blends psychology with economics to give alternative approaches to decision-making and alternative approaches to policy making. Better candidates will demonstrate a clear understanding of the different approaches which they will apply to the reasons for market failures and to a range of real-world examples.	
	This question clearly requires candidates to make a judgement about whether a role remains for policies based on traditional economics.	
	Answers may include:	
	Knowledge and **understanding** of the underlying difference between behavioural economics and 'traditional' economics in terms of the contribution that BE has made to economic policy making when markets fail to allocate resources efficiently and equitably. Knowledge and understanding of the reasons for market failure in terms of efficiency and equity.	

Question	Answer	Marks
4	Examples: • Public goods and quasi-public goods: rival and excludable • Externalities: positive and negative • Information failures: • Policies in cases of market failure: traditional economics would include government provision, Pigouvian taxes and subsidies, cap and trade, regulation, marketable permits • An understanding of other applications and tools of behavioural economics such as loss aversion, hyperbolic discounting, nudges, default choices, constrained choices, framing, the use of social norms etc. **Application** of traditional and behavioural economic thinking to market failures. Examples: • Application of externalities to market failure • Application of information failure to market failure • Application of behavioural biases and heuristics to market failure • Application to sustainable resources including control of pollution • Application to distributional implications of alternative policies **Analysis** of market failure outcomes and associated policy recommendations under traditional and behavioural economics. Examples: • MSC/MSB diagram and deadweight loss • Under/over provision of goods • Non-sustainable use of resources • Prospect theory • Hyperbolic discounting • Bounded rationality and heuristics **Evaluation** of the extent to which policies to overcome market failure to allocate resources efficiently and equitably should be based on behavioural economics and whether policies based on traditional economics still have a role to play. At the lowest end, candidates will evaluate behavioural economics or traditional economics in general or make statements about individual policies. Better evaluation will focus on a wide range of reasons for market failures and the strengths and shortcomings of policies suggested by both behavioural economics and traditional economics. Strong candidates may have supporting evidence to assess the extent to which behavioural economics has advanced the policies used by economists in analysing market failure and its associated policies. They may choose to discuss whether decisions made by policy makers would have been similar by homo economicus and under behavioural economics.	

Question	Answer	Marks
4	Examples of evaluation: • Is there a role for policies suggested by traditional economics? • Does behavioural economics offer viable alternatives? • Should policies suggested by behavioural economics be the only ones used? **Theory and Analysis**	

Level 4 (18–22 marks) Mid mark 20	In this level, it is clear how both traditional and behavioural economics have contributed to the study of market failures. This should encompass policy recommendations under a wide range of reasons for market failure including efficiency and equity. In coming to a decision about whether behavioural economics is the best or only appropriate policy approach, candidates are expected to compare behavioural economics with 'traditional' economics based on homo economicus. At the top end of this level, development of points is thorough and detailed, with supporting evidence and data, incorporated within an answer with strong economic foundations. The use of theory and analysis is comprehensive, with almost flawless integration of the two into a clearly flowing essay.
Level 3 (12–17 marks) Mid mark 15	In this level, a clear attempt is made to answer the specific question set with reference to the contribution of behavioural economics in a range of applications with a comparison to how 'standard' economics would analyse the same decisions. Links between the question being asked and the perspective being put forward are clear. There is a solid understanding of a range of supporting points, with relevant supporting empirical examples. Use of economic theory, terminology and application is correct and regular, though may contain some errors at times. Towards the top of this level, the link to policies from traditional and behavioural economics thinking may not be explicit, preventing L4. The range of alternatives may be narrow or there may limited comparison to 'standard' economics.
Level 2 (6–11 marks) Mid mark 9	At the top end of this level, a generalised attempt to answer the question has been made but candidates fall short on critical awareness or current context. They may make only a superficial attempt to answer the specific question set, discussing behavioural economics in general with a largely pre-rehearsed response. There may be a limited attempt at considering traditional and behavioural economics contribution to policy making under market failure with candidates giving unexplained and cursory descriptions of reasons for market failure and policy solutions.

Question	Answer	Marks
4	**Level 1 (1–5 marks) Mid mark 3** — There is a lack of understanding of what is meant by market failure and policies that decision makers need to consider under traditional economics and behavioural economics.	
	Evaluation	
	Level 3 (13–18 marks) Mid mark 16 — Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this level, there will be signs of real in-depth research and/or originality. In all cases there will be a clear conclusion drawn at the end that relates specifically to the set question.	
	Level 2 (7–12 marks) Mid mark 10 — At least two relevant issues will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification. Any conclusion will do little more than sit on the fence.	
	Level 1 (1–6 marks) Mid mark 4 — Some of the issues that could be open to evaluation may be introduced into the discussion but there is no attempt to go further than to show an appreciation of the issue – for example, 'behavioural economics is more likely than traditional economics to give appropriate policies when markets fail'. There is no attempt to draw together the relevant issues in a conclusion.	