

Cambridge International AS & A Level

Paper 4 Data Response and Essays

MARK SCHEME

Maximum Mark: 70

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.

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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.

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.

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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.

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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.

Assessment objectives

AO1 Knowledge and understanding

- Show knowledge of syllabus content, recalling facts, formulae and definitions.
- Demonstrate understanding of syllabus content, giving appropriate explanations and examples.
- Apply knowledge and understanding to economic information using written, numerical and diagrammatic forms.

AO2 Analysis

- Examine economic issues and relationships, using relevant economic concepts, theories and information.
- Select, interpret and organise economic information in written, numerical and diagrammatic form.
- Use economic information to recognise patterns, relationships, causes and effects.
- Explain the impacts and consequences of changes in economic variables.

AO3 Evaluation

- Recognise assumptions and limitations of economic information and models.
- Assess economic information and the strengths and weaknesses of arguments.
- Recognise that some economic decisions involve consideration of factors such as priorities and value judgements.
- Communicate reasoned judgements, conclusions and decisions, based on the arguments.

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Table A: AO1 Knowledge and understanding and AO2 Analysis

Use this table to give marks for each candidate response for AO1 Knowledge and understanding and AO2 Analysis for **Questions 2**, **3**, **4** and **5**.

Level	Description	Marks
3	A detailed knowledge and understanding of relevant economic concepts is included, using relevant explanations. Explanations are supported by examples, where appropriate.	11–14
	The response clearly addresses the requirements of the question and explains economic issues, and fully develops these explanations.	
	Analysis is developed and detailed and makes accurate and relevant use of economic concepts and theories. Where necessary, there is accurate and relevant use of analytical tools such as diagrams and formulae, and these are fully explained.	
	Responses are well-organised, well-focused and presented in a logical and coherent manner.	
2	Knowledge and understanding of some relevant economic concepts is included, using explanations and examples that are limited, overgeneralised or contain inaccuracies.	6–10
	The response addresses the general theme of the question and the relevant economic issues, with limited development.	
	Analysis is generally accurate with some development but little detail. Uses analytical tools such as diagrams and formulae where necessary. Use of these tools is partially accurate or not fully explained.	
	Responses are generally logical and coherent but are sometimes lacking in focus or organisation.	
1	A small number of relevant knowledge points are included and the response is limited by significant errors or omissions.	1–5
	The response has little relevance to the question.	
	Analysis where provided is largely descriptive. Use of analytical tools such as diagrams and formulae, where necessary, may contain significant errors or be omitted completely.	
	Responses show limited organisation of economicideas.	
0	No creditable response.	0

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Table B: AO3 Evaluation

Use this table to give marks for each candidate response for AO3 Evaluation for $\bf Questions~2,~3,4$ and $\bf 5$.

Level	Description	Marks
2	Provides a justified conclusion or judgement that addresses the specific requirements of the question.	4–6
	Makes developed, reasoned and well-supported evaluative comment(s).	
1	Provides a vague or general conclusion or judgement in relation to the question.	1–3
	Makes simple evaluative comment(s) with no development and little supporting evidence.	
0	No creditable response.	0

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Section A Data response

Question	Answer	Marks
Follow the	point-based marking guidance at the top of this mark scheme.	
1(a)	Explain what is meant by purchasing power parity (PPP).	2
	 A comparison of the cost of a bundle of goods and services bought with the local currency (1) with the cost of the same bundle bought with another currency (1) For example, a bundle which costs 500 Pakistan Rupees and 2 US\$ would give a PPP of 250R = 1 \$ (1) 	
1(b)	 Explain, with the help of a diagram, the likely impact of the BRI on both the potential economic growth and the actual economic growth of Pakistan. Actual economic growth will reflect an increase in Pakistan's GDP per year using existing resources.(1) Potential economic growth is the outwards movement of Pakistan's PPC (1) 	4
	Consumption goods PPC2 PPC1 PPC = Production possibility curve Capital goods • Accurately drawn and labelled graph (1) showing showing/referring to both movement from x to y for actual economic growth and PPC1 to PPC2 for potential economic growth (2) Max 3 if diagram is not accurately drawn and labelled.	

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Question	Answer	Marks
1(c)	Consider, with reference to Table 1.1, the change in the standard of living in Pakistan and China between 2014 and 2018.	6
	 What is meant by the standard of living (SoL) (1) Split material and non-material SoL (1) GDP pc has risen for China 28% (1) and Pakistan 14% (1) Unemployment has fallen for countries for China (1) and Pakistan (1) Gini Coefficient has fallen in China (1) and risen in Pakistan (1) Max 3 marks for simple statements 	
	 Link Material SoL to GDP pc both better off (1) Change in Gini coefficient means the increase in income has become more evenly spread in China and less evenly spread in Pakistan. (1) Material SoL is likely to have increased in China and may have fallen in Pakistan (1) Rising employment is linked to rising SoL (1) No data on non-material aspects of SoL such as pollution or working hours (1) Max 3 marks for further developments 	

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Question	Answer	Marks
1(d)	Evaluate, using the article, the likely impact of the BRI on the economies of Pakistan and China in the long run.	8
	Advantages	
	 China More exports of capital equipment rail equipment, cement and steel. Cheaper export routes to middle eastern and western market allowing development of western Chinese provinces. Use of excess Chinese capacity lowering Chinese cost of production at home boosting profits. Market for Chinese bank loans. 	
	 Pakistan Inwards investment on railways/Gwadar port/industrial zones. Boost AD and AS leadings to higher non-inflationary GDP Investment in reliable electricity supply with benefits for industry, and improve consumer standard of living domestic comfort and human capital through better education. 	
	Disadvantages	
	 Power stations are coal/nuclear energy technology considered polluting. The former contributing to global warming. Debts for Pakistan to repay. Initial employment benefits for Pakistan unclear if construction uses Chinese labour. No clear indication of profitability to Pakistan Ability of Pakistan to repay the loans. Currently approximately 25% of GDP. 	
	 Pakistan may default on repayment of loans to China. Judgement: Based on the evidence provided. (1) 	
	Guidance: MAX 5 marks for advantages. Both China and Pakistan must be considered. Max 5 Marks for disadvantages. Max 5 Marks if only one country considered. Max 7 marks for 2 sided answers. Judgement of the impact of BRI on Pakistan and China 1 mark.	

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Question	Answer	Marks
EITHER		
2	The increased use of electric vehicles (EVs) is encouraged as part of governments' climate change policies because they create fewer negative externalities than diesel and petrol (gas) vehicles.	20
	Evaluate, with the help of diagrams, two policies that a government may use to encourage the use of EVs.	
	Use Table A: AO1 Knowledge and understanding and AO2 Analysis and Table B: AO3 Evaluation to mark candidate responses to this question.	
	AO1 and AO2 out of 14 marks. AO3 out of 6 marks.	
	Indicative content	
	Responses may include:	
	 AO1 Knowledge and understanding and AO2 Analysis Market failure regarding this question would relate to allocative inefficiency. Market failure can be explained by defining allocative efficiency and linking this to the requirement to allocate resources to maximise consumer satisfaction. This can be supported by a diagram illustrating a level of output where AR = MC or MSB = MSC which is consistent with an outcome that achieves allocative efficiency. Negative externalities occur when the when the consumption/use of a good produces a cost to society which is greater than that received by an individual producer MPB > MSB or MSC > MPC. This is sometimes described as a negative 'spill-over' effect. The negative externality leads to an over production of the good. Government intervention takes place to address the failure of market forces to allocate resources efficiently. In this case positive externalities would lead to under-consumption of a good or service. Different types of government intervention can be used to correct the under-production of output to enable consumer satisfaction to be maximised. Forms of government intervention might include: the use of subsidies for consumers to increase consumption and also producers to change production methods, use of positive advertising; the direct provision of goods and services such as alternative transport methods. Indirect taxation. Nudge theory effects. 	
	 A clearly labelled, accurate diagram can be used to show the impact of a positive/negative externality on the level of output and the welfare change will be identified. The diagram could show the market equilibrium point which does not take into account the existence of a negative consumption externality and may 	
	compare this with the allocatively efficient level of output when the negative externality is taken into account. The diagram may be amended or re-drawn to show the impact of a chosen policy(ies) and the impact on consumption or production shown.	
	 Reference to the diagram and the outcomes it illustrates is made in the text. 	

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Question	Answer	Marks
2	AO3 Evaluation	
	 A government might introduce a subsidy to encourage producers to increase output to enable allocative efficiency, however it is difficult to measure the precise value of the subsidy. Subsidies are costly in that the funds might have been used by governments for other purposes. This means governments will have to make a value judgement when deciding whether to provide a subsidy. Also, the impact on price and output in some circumstances takes a long time to become effective. Advertising is often costly and it is not always certain that it will have a sufficiently persuasive effect to ensure the correct level of output/ consumption is reached. Direct provision is also costly and sometimes less efficient than that provided through market forces. It is possible to show that government intervention can reduce the level of inefficiency caused by the existence of positive externalities but it is not clear whether the net effect of government intervention will always be positive. Some types of intervention will be more effective than others depending on the nature of the good/service under consideration. Accept all valid responses. 	
	AO1 Knowledge and understanding and AO2 Analysis	14
	AO3 Evaluation	6

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Question	Answer	Marks
OR		
3	Evaluate, with the help of a diagram(s) how total market demand and minimum efficient scale may determine the form of market structure in an industry.	20
	Use Table A: AO1 Knowledge and understanding and AO2 Analysis and Table B: AO3 Evaluation to mark candidate responses to this question.	
	AO1 and AO2 out of 14 marks. AO3 out of 6 marks.	
	Indicative content	
	Responses may include:	
	 AO1 Knowledge and understanding and AO2 Analysis The concepts of increasing/constant/decreasing returns to scale and the minimum efficient scale (MES) of production the level of output where LRAC are initially minimized. The explanation of a number of examples of economies of scale: division of labour, financial, marketing, managerial technical and their impact on the long run average cost curve (LRAC). An analysis of the relationship between total demand for a product and the minimum efficient scale effectively total demand divided by MES to give the maximum number of firms who could operate at the MES. A description of different forms of market structure eg perfect competition, monopolistic competition, oligopoly or monopoly. An analysis of the relationship between the MES and the market demand determining the number of firms many/a few/one equivalent to perfect competition, monopolistic competition, oligopoly or monopoly. Examples MES and market demand. MES = 50% therefore in theory 2 firms – a duopoly MES 2% therefore 50 firms perfect/monopolistic competition. Relevant diagram for economies of scale with indication of MES and demand curve. AO3 Evaluation MES is not static and may change over time eg technological change. The definition of the market will affect the calculation of the relationship. The village shop which operates at a small scale is appropriate for the village market. Markets will still exist where particular firms produce small scale high-cost items e.g. luxury cars or designer clothes to satisfy a niche portion of a bigger market. ACCEPT all valid responses 	14
	AO1 Knowledge and understanding and AO2 Analysis	14
	AO3 Evaluation	6

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Question	Answer	Marks
EITHER		
4	Consider the extent to which the depreciation of its foreign exchange rate contributes to the economic growth of a low-income country.	20
	Use Table A: AO1 Knowledge and understanding and AO2 Analysis and Table B: AO3 Evaluation to mark candidate responses to this question.	
	AO1 and AO2 out of 14 marks. AO3 out of 6 marks.	
	Indicative content	
	Responses may include:	
	 AO1 Knowledge and understanding and AO2 Analysis Knowledge and understanding of the effect of depreciation on the external value of a country's currency (exchange rate - ER), economic growth and low-income country Analysis of this effect on the price of exports (X) and imports (M) and the effect on their demand and supply, links to aggregate demand (AD) through the balance of payments effect (X-M) Candidates may refer to this in terms of injections and leakages and their effect on AD AD and AS diagram showing this may be used to show the effect on the level of national income. Alternatively, the analysis of the increased injection may be through the multiplier effect and/or the 45° diagram. A clear link must be made between the effect of the depreciation and the level of economic growth, the type of economic growth: actual or potential should be made. AO3 Evaluation The ability of supply capacity in the low-income country to react to the effect of the depreciation. The nature of many developing countries exports of agricultural commodities being price inelastic in supply compared with oil exports. The short run effects on employment (positive) and inflation (negative) Beneficial effect on ability to service international debt positive if denominated in domestic currency but negative if borrowings are in a foreign currency. 	
	AO1 Knowledge and understanding and AO2 Analysis	14
	AO3 Evaluation	6

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Question	Answer	Marks
OR		
5	Evaluate the effectiveness of using monetary policy to reduce the rate of inflation and how this policy may affect a government's ability to achieve its other macroeconomic aims.	20
	Use Table A: AO1 Knowledge and understanding and AO2 Analysis and Table B: AO3 Evaluation to mark candidate responses to this question.	
	AO1 and AO2 out of 14 marks. AO3 out of 6 marks.	
	Indicative content	
	Responses may include:	
	 AO1 Knowledge and understanding and AO2 Analysis A knowledge of monetary policies which might include interest rate, money supply, exchange rates and reserve asset ratio policy. A definition of inflation and a statement of a government's macroeconomic aims: eg low unemployment, economic growth and balance of payments equilibrium. An explanation of the impact of higher interest rates to reduce inflation either through consumer demand or its impact on investment. This can be shown either through the monetary transmission mechanism analysis or AS/AD analysis. Alternative macroeconomic aims of the government are identified for example economic growth, unemployment and balance of payments. The model employed to analyse the reduction in inflation is applied to the alternative aims to find the outcomes. Phillips curve analysis may be used to demonstrate the relationship between inflation and employment to illustrate the unlikelihood of both low inflation and low unemployment being achieved together. AO3 Evaluation Evaluation Evaluation may be concerned with either the analysis used to reduce inflation or the ability to meet all the macroeconomic aims. An initial analysis of the monetary policy to reducing the level of inflation which may be in terms of how accurate the central bank is in determining the increase in the rate of interest/reserve asset ratio required or reduction in the money supply. The time lags between policy implementation and outcome may also be discussed. Expectations and the role they play in determining policy outcomes. The model(s) employed will show either the effect of the policy on the alternative aims and requires an explicit comment on whether this enables the alternative to be achieved or not. Two examples of a contradiction in the simultaneous achievement of the aims need to be shown and commented upon. The short and long run implications of infla	

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Question	Answer	Marks
5	 The short run and long run effects of the chosen inflation policy can be compared in terms of actual and potential reduction/increase in economic growth. The relationship between the rate of inflation, the exchange rate and the balance of payments including the Marshall-Lerner effect. Accept all valid responses.	
	AO1 Knowledge and understanding and AO2 Analysis	14
	AO3 Evaluation	6

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