AQA

A-level
ECONOMICS
7136/3

PAPER 3 ECONOMIC PRINCIPLES AND ISSUES

Mark scheme

June 2021

Version: 1.0 Final Mark Scheme

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk

SECTION A

KEY LIST

1	**B** (the higher marginal revenue productivity of graduates.)	**11**	**D** (not buy the motorbike because they do not know as much about the motorbike as the dealer.)	**21**	**C** (firm is maximising its abnormal profit and has no incentive to expand its production.)
2	**A** (can have microeconomic as well as macroeconomic effects on the economy.)	**12**	**A** (A decline in the capital stock resulting from a significant decline in bank funding for business investment)	**22**	**D** (the marginal propensity to consume combined with a fall in the exchange rate.)
3	**B** (negative externalities in production and positive externalities in consumption.)	**13**	**A** (accepting the default choice.)	**23**	**B** (A reduction in firms' unit costs of production.)
4	**D** (The government's budget deficit increases as the rate of unemployment is reduced)	**14**	**C** (Savings will increase as interest rates rise in real terms)	**24**	**D** (The removal of a subsidy to tea producers and a fall in the price of coffee)
5	**D** (Country 4 has the highest life expectancy and literacy rates)	**15**	**B** (inelastic.)	**25**	**B** (a negative output gap equal to £6 billion.)
6	**D** (H_1 - H_2)	**16**	**B** (increase its average revenue by 20%.)	**26**	**D** (short-term finance is provided for companies and governments.)
7	**D** (most likely to be a commercial bank because its main liabilities are customer deposits.)	**17**	**C** (3.8%)	**27**	**A** (job security for qualified workers in the industry.)
8	**D** (public goods.)	**18**	**B** (20/400)	**28**	**C** (£525 billion)
9	**C** (OPHJ)	**19**	**A** (level of investment.)	**29**	**D** (tariffs to raise the price of imports.)
10	**D** (projected tax revenue by more than £100 billion)	**20**	**A** (A decrease in the cost of producing the good) **OR** **C** An increase in the price of the good	**30**	**B** (A fall in the prices of raw materials and an increase in investment.)

Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

SECTION B

INVESTIGATION **Total for this investigation: 50 marks**

3 1 *The UK government has set a target to reduce net greenhouse gas (GHG) emissions to zero by 2050.*

*To what extent, if at all, do the data suggest that to achieve its net-zero emissions target, the government should focus on reducing GHG emissions from the transport sector? You must use the data in **Extract C** to support your assessment.*

[10 marks]

Level of response	Response	Max 10 marks
Level 3	**A good response that:** • is well organised and includes at least three relevant, well-developed issues • makes effective use of the numerical/statistical data in **Extract C** • shows some appreciation of the limitations of the data • includes a supported final judgement concerning the extent to which the data suggest that the government should focus on reducing GHG emissions from the transport sector.	**8–10 marks**
Level 2	**A reasonable response that:** • is fairly well organised and includes at least two relevant and fairly well-developed issues • includes some satisfactory use of the numerical/statistical data in **Extract C** • may show some appreciation of the limitations of the data • at the top of the level, is likely to include a final judgement regarding the extent to which the data suggest that the government should focus on reducing GHG emissions from the transport sector.	**4–7 marks**
Level 1	**A weak response that:** • is very brief and/or lacks coherence • may include one or more superficial points regarding the extent to which the data suggest that the government should focus on reducing GHG emissions from the transport sector • contains very limited or poor use of the data in **Extract C** • doesn't show any appreciation of the limitations of the data • may include an unsupported judgement concerning the extent to which the government should focus on reducing GHG emissions from the transport sector.	**1–3 marks**

When assessing the extent to which the government should focus on reducing GHG emissions from the transport sector, most students are likely to base their assessment on the data in **Extract C**. However, they can also be rewarded for making relevant use of the other extracts and their own knowledge.

Relevant issues include:

- explanation of what is meant by a net-zero emissions target
- explanation of how a net-zero emissions target might be achieved
- **Figure 1** shows that the change from the previous target to the net-zero emissions target will mean GHG emissions will have to be reduced by around 160 $MtCO_2e$ more by 2050
- recognising that this is more than the total GHG emissions from the transport sector
- **Figure 1** shows that, in total, between 2020 and 2050, emissions need to be reduced by around 500 $MtCO_2e$
- there has been little change in GHG emissions from the transport sector between 1990 and 2017, it has fallen from 128.1 $MtCO_2e$ to 125.9 $MtCO_2e$
- in 2017, GHG emissions from the transport sector are higher than any other sector
- in 1990, GHG emissions from the transport sector were 16.1% of the total whereas in 2017 they were 27.4% of the total
- GHG emissions from supplying energy have fallen substantially between 1990 and 2017, from 277.9 $MtCO_2e$ to 112.6 $MtCO_2e$, by 60%
- GHG emissions from every sector have fallen more rapidly than the transport sector, hence transport is the only sector that has seen its share of GHG emissions increase
- the reduction in GHG emissions from the energy sector has largely resulted from the reduction in the use of coal (119 950 to 22 530 GWh) and the increase in the use of renewables (10 360 to 98 792 GWh) to supply electricity
- the use of gas to produce electricity has fluctuated but in 2017, it is still a large proportion of the total, around 41%
- the continuing high level of emissions from the transport sector indicates that policy does need to focus on reducing GHG emissions from this sector
- the reduction in emissions from the energy sector and the growth in the use of renewables might indicate that the target can be achieved without new policies targeted at energy supply
- in 2017, energy supply still accounts for over 24% of total GHG emissions, the sector can't be ignored
- emissions from other sectors have fallen, but if net-zero emissions is to be achieved, there is still a lot to be done in some of these other sectors
- limitations of the data might include:
  - cannot be certain how easy it is going to be to continue to reduce the amount of energy produced from fossil fuels and increase the proportion generated from renewables
  - no information on the cost of producing electricity from different sources
  - difficult to know how changes in technology will affect the situation
  - difficult to predict how markets might help to achieve a reduction GHG emissions without changes to government policy
  - no information on current policies and their impact, eg UK policy of banning the sale of all petrol and diesel cars by 2040

As indicated in the level of response mark grid above, a good response will include a supported final judgement concerning the extent to which the data suggest that the government should focus on reducing GHG emissions from the transport sector. A good response will quote data to support the judgement and data should be quoted accurately. It is likely that good answers will conclude that the government needs to achieve a reduction in GHG emissions from the transport sector but if the net-zero emissions target is to be achieved, other sectors cannot be ignored. However, they should not be penalised for a different conclusion, provided it is well supported.

MAXIMUM FOR QUESTION 31: 10 MARKS

3 2 *Explain why, without government intervention, markets are likely to allocate too few resources to dealing with the problem of climate change.*

[15 marks]

Level of response	Response	Max 15 marks
Level 3	**A good response provides an answer that:** • is well organised and develops a selection of the key issues that are relevant to the question • shows sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning.	**11–15 marks**
Level 2	**A reasonable response provides an answer that:** • focuses on issues that are relevant to the question • shows satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places.	**6–10 marks**
Level 1	**A weak response provides an answer that:** • has one or more relevant issues identified • has some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • has very limited application of relevant economic principles and/or data to the question • might have some limited analysis but it may lack focus and/or become confused.	**1–5 marks**

Remember: AO4, ie evaluation, is not being assessed through this question.

Relevant issues include:

- the environment as a public good
- externality arguments relating to the causes of climate change
- why negative externalities in production and consumption lead to overproduction
- why the prices of many goods and services do not reflect their true cost
- examples to illustrate goods and services that are under-priced
- difficulty in assigning and enforcing property rights and the significance of this
- climate change and the 'tragedy of the commons'
- the significance of people placing less value on future costs and benefits than current costs and benefits (the present bias)
- the significance of vested interests and who has power over decision making

The use of relevant diagrams to support analysis should be taken into account when assessing the quality of a candidate's response to the question.

MAXIMUM FOR QUESTION 32: 15 MARKS

3 3 *After considering **Extract E**, and the original evidence in **Extracts A, B, C** and **D,** which policies, if any, would you recommend that the UK government should introduce to ensure that it achieves its zero-emissions target by 2050. Justify your recommendation.*

[25 marks]

Level of response	Response	Max 25 marks
Level 5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21–25 marks**
Level 4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16–20 marks**
Level 3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.	**11–15 marks**
Level 2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.	**6–10 marks**
Level 1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes analysis which is, at best, very weak • includes attempted evaluation which is weak and unsupported.	**1–5 marks**

Relevant issues and areas for discussion include:

- explanation of what is meant by the zero-emissions target
- why further government action might be needed to ensure the target is achieved by 2050
- explanation of policies that the UK government could introduce to reduce emissions, examples include: carbon taxes, pollution permits, regulations, subsidies for technologies that reduce GHG emissions, carbon border tax
- the advantages and disadvantages of individual policies
- some policies may shift production that causes GHG emissions to other countries, eg in Asia or Africa
- whether policies should focus on consumption instead of, or as well as, production
- the costs of policies to reduce GHG emissions for particular industries/sectors of the economy
- the benefits of policies to reduce GHG emissions for particular industries/sectors of the economy
- opportunities to develop 'new industries' in growing markets and create export opportunities
- the role of market forces in reducing GHG emissions
- the impact on short-run and long-run growth
- the impact on employment and unemployment
- the impact on inflation
- the impact on the balance of payments
- possible regional effects
- effects on the distribution of income, eg some policies may be regressive
- short-run versus long-run effects
- role of moral and political judgements
- judgements relating to the relative merits of different policies
- the significance of the global nature of the climate change problem
- consideration of the case for and against not taking any further action
- a supported recommendation in favour of a particular policy/set of policies/or to take no further action.

The use of relevant diagrams to support analysis should be taken into account when assessing the quality of a candidate's response to the question.

An answer that does not include any evaluation or a supported recommendation must not be awarded more than 13 marks.

MAXIMUM FOR QUESTION 33: 25 MARKS