UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2012 question paper

for the guidance of teachers

0457 GLOBAL PERSPECTIVES

0457/03   Paper 3 (Written Paper), maximum raw mark 60

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 must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2012 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

1   Refer to Source 1.

(a) Give three causes of deforestation from Source 1.

Candidates may identify the following causes of deforestation from Source 1:

- Population growth
- Climate change
- Weak government
- Weak/no strong laws protecting forests
- Illegal logging
- More land needed to grow food
- More land is needed to grow bio-fuels
- Trees can't survive in natural habitats
- More people need more food
- People look for alternatives to bio-fuels

1 mark for each correct answer, up to a maximum of three marks

Further guidance – note that the only acceptable answers are located in the top half of Source 1 in the section labelled 'CAUSES'. However candidates may use their own words to describe a cause from this list. E.g. 'the number of people in the world is getting greater' is acceptable for 'population growth'.

(b) Which one of these causes do you think is most important? Why?   [3]

Indicative Content

Candidates are likely to give the following type of reasons to justify their choice:

- Possible consequences
- Urgency or time factors
- Degree of impact/seriousness/magnitude
- How many people/groups/countries are affected
- Increasing cycle of difficulty
- Other reasonable response

Further guidance – candidates may discuss 'cause(s)' from:

- *the three causes he/she has chosen in response to Q1(b)*
- *the top half of Source 1*
- *background knowledge*

Level 3: Strong Response   [3]

Clearly reasoned explanation of why one cause is more important than another; may compare with one or more other causes.
e.g. Population growth is the most important cause of deforestation, because other causes are easier to deal with. For example illegal logging could be dealt with by better security and laws, and there are other ways to deal with climate change than bio-fuels. But people must have food, and it is hard to reduce the population.

Level 2: Reasonable Response

Clearly reasoned explanation of why one cause is important; no attempt to compare cau~~~
*e.g. Population growth is most important because feeding people is very important for peop~~
to live and more people means more food is needed, so it is hard to fight deforestation
caused by this.*

Level 1: Basic Response [1]

Identifies a cause as important but reasoning is weak or not linked to deforestation or not
present.
e.g. Population growth is most important because it is changing the world.

No relevant response or creditworthy material. [0]

(c) **Give three consequences of deforestation from Source 1.** [3]

Candidates may identify the following consequences of deforestation from Source 1:

Climate change	Natural disasters e.g. floods; landslides
Hunger	Thirst
Illness	Species extinction
Loss of animal habitats	Soil erosion/loses quality
Less rainfall	Less oxygen in air
Potential medicines lost	Less food can grow
The food chain suffers	The earth is poorer
More carbon dioxide in the air	

1 mark for each correct answer, up to a maximum of three marks

*Further guidance – note that the only acceptable answers are located in the bottom half of
Source 1 in the section labelled 'CONSEQUENCES'. However candidates may use their own
words to describe a cause from this list. E.g. 'an increase in famine' is acceptable for 'hunger'
or 'less food can grow'.*

(d) **Which one of these consequences do you think is most important? Why?** [3]

Indicative Content

Candidates are likely to give the following type of reasons to justify their choice:

- Nature of consequence – how nasty!
- Urgency or time factors
- Degree of impact/seriousness/magnitude
- How many people/groups/countries affected
- Increasing cycle of difficulty
- Other reasonable response

Further guidance – Candidates may discuss 'consequences(s)' from:
- *the three causes he/she has chosen in response to Q1(b)*
- *the bottom half of Source 1*
- *background knowledge*

Level 3: Strong Response

Clearly reasoned explanation of why one consequence is more important than another, compare with one or more other consequences; OR a response which explores one cause in a sophisticated way showing *clear, explicit awareness* of the interrelated nature of a range of consequences, a 'vicious cycle' or 'domino/multiplier effect'; this needs to be more than a list-like description of various 'knock-on' effects

e.g. 'hunger is the most important consequence because it is also one of the reasons why people cut down tress and cause deforestation to get more food, so this will lead to a cycle of destruction, whereas the other consequences such as illness and potential medicines lost can be solved by science in other ways'
OR
'animals losing their habitats is the most important effect because it affects the earth and creatures that should be preserved. This in turn creates more problems, for example loss of new medicines and the food chain is disturbed. This is like a domino effect.'

Level 2: Reasonable Response   [2]

Clearly reasoned explanation of why one consequence is important; no attempt to compare consequences. This is likely to be a description of one or more effects/impacts of the consequence identified, but not developed.
e.g. hunger is most important because food is so important to human survival

Level 1: Basic Response   [1]

Identifies a consequence as important but reasoning is weak or not present at all.
e.g. hunger is most important because it's bad.

No relevant response or creditworthy material.   [0]

2   **Refer to Source 3. You are in the audience for the television debate in Source 3. Suggest <u>one</u> question that you might ask Lung Lin Hao and <u>one</u> that you might ask Niki Mazazul and explain how their answers might help you to decide on the best way to reduce deforestation.**

(a)   **Question for Lung Lin Hao**   [2]

Indicative Content

Lung Lin Hao is an economist and the statement raises the following issues/points that could form the focus for a question:

- Local people are ignorant and lack training
- Local people do not understand business and can't find the best markets
- Local people argue amongst themselves
- 80% of Mexico's forests are not managed at all
- To stop deforestation farmers should be paid to leave trees or re-grow them
- Examples of the policy from China, Costa Rica, New York, Britain and Norway
- Other reasonable focus e.g. related to content of Arbor Green's statement to which Lung Lin Hao is responding

Further guidance – if the candidate suggests more than one question, credit the most appropriate response, or treat holistically if the parts of the response are clearly intended to be related together, for example as a clarifying/supplementary element.

Level 2: Reasonable Response

Well-phrased question which would get relevant information clearly related to deforest...
and/or the content of the statement.
e.g. What evidence do you have that local people lack training in the management of forests
and business?

Level 1: Basic Response [1]

Question which might get some information generally related to deforestation and/or the
topics in the statement.
e.g. Why are people ignorant?

No relevant response or creditworthy material. [0]

How the answer might help me decide on the best way to reduce deforestation. [4]

Level 4: Strong Response [4]

Clear, reasoned and developed explanation of how the answer/information may be used to
help make a decision about the best way to reduce deforestation (often phrased as – if this
information is given … then … I could decide that …)

Level 3: Reasonable Response [3]

Clear explanation of how the answer/information may be used to help make a decision about
the best way to reduce deforestation; reasons may be stated simply and not
developed/linked explicitly to deforestation.

Level 2: Basic Response [2]

Attempts to explain how the answer/information may be used to make a decision about the
best way to reduce deforestation but partial and/or generalised and/or lacks clarity.

Level 1: Limited Response [1]

Simple statement of information without explanation or linkage to the best way to reduce
deforestation; or only hints at relevance.

No relevant response or creditworthy material. [0]

(b) Question for Niki Mazazul [2]

Indicative Content

Niki Mazazul is a community activist and the statement raises the following issues/points that
could form the focus for a question:

- Fair treatment for people before trees
- We shouldn't blame poor people who need to feed their families, in Indonesia or New
  Orleans or elsewhere
- We need to create a fair system for people
- People should be helped to change their actions without suffering
- Other reasonable focus e.g. related to content of Lung Lin Hao's statement to which Niki
  Mazazul is responding

Further guidance – if the candidate suggests more than one question, credit
appropriate response, or treat holistically if the parts of the response are clearly inte...
be related together, for example as a clarifying/supplementary element.

Level 2: Reasonable Response [2]

Well-phrased question which would get relevant information clearly related to deforestation
and/or the content of the statement.
e.g. How does a system that treats people fairly reduce deforestation?

Level 1: Basic Response [1]

Question which might get some information generally related to deforestation and/or the
topics in the statement.
e.g. What is a fair system?

No relevant response or creditworthy material. [0]

How the answer might help me decide on the best way to reduce deforestation. [4]

Level 4: Strong Response [4]

Clear, reasoned and developed explanation of how the answer/information may be used to
help make a decision about the best way to reduce deforestation (often phrased as – if this
information is given … then … I could decide that … because …)

Level 3: Reasonable Response [3]

Clear explanation of how the answer/information may be used to help make a decision about
the best way to reduce deforestation; reasons may be stated simply and not developed/
linked explicitly to deforestation.

Level 2: Basic Response [2]

Attempts to explain how the answer/information may be used to make a decision about the
best way to reduce deforestation but partial and/or generalised and/or lacks clarity.

Level 1: Limited Response [1]

Simple statement of information without explanation or linkage to the best way to reduce
deforestation; or only hints at relevance.

No relevant response or creditworthy material. [0]

Further Guidance

Note that the questions should be focused on the role of the person, their statement and
show awareness of what each person might know; a question which would gain full marks if
asked of Lung Lin Hao may well not gain full marks if asked of Niki Mazazul. Note also that
candidates should ask for new or further development of information, not for information or
arguments which have already been provided in the stimulus material.

3 **Study Source 2.**

(a) **What does the cartoon suggest about different perspectives on deforestation?**

Indicative Content

The cartoon contains two main perspectives – that of the wealthy, developed countries/character and that of the poorer, undeveloped countries/character. Essentially the wealthy character wants to prevent trees from being cut down to protect us from the greenhouse effect, whilst the poorer character needs the wood from the trees for survival and can't understand the view of the rich character, especially as he is also responsible for causing the greenhouse effect through pollution from the use of vehicles. There is a degree of hypocrisy in the attitude of the rich character.

The focus of the question is upon interpreting and describing the different perspectives.

Level 3: Strong Response [3]

Clear description of both perspectives on deforestation within the cartoon; may reveal (but not essential) some understanding of conflict between and/or potential hypocrisy within either of the perspectives.

e.g. It shows that the poor want to use the land for their survival to grow food and wood for cooking. They need to cut down trees. The rich want to stop the greenhouse effect because they have environmental worries so want the trees to keep growing

OR

If you come from a less developed country you might think that it is wrong for rich people from developed countries to tell other people off for cutting down trees. Their cars cause just as much of a problem. The rich think that the poor don't look after the forests and don't know about the dangers.

Level 2: Reasonable Response [2]

Shows some partial understanding of both of the different perspectives on deforestation in the cartoon; OR only one is clearly described.

e.g. It shows that people from developed countries don't want deforestation because of the greenhouse effect. The other man doesn't understand what is happening.

Level 1: Basic Response [1]

Attempts to describe the content of the cartoon, usually partially and/or simply; does not clearly describe or differentiate between the two perspectives on deforestation.

e.g. It shows a fat person from a developed country in a big car shouting at a thin person who wants to cut a tree down.

No relevant response or creditworthy material [0]

(b) **Refer to Source 3. Arbor Green says in Paragraph B, 'It would be fairer for they (forests) were managed by local communities.' How can this state described: fact, opinion, value judgement, prediction, consequence? Explain answer.**

Indicative Content

The basic meaning of each of these key terms is:

- Consequence – a logical result or effect
- Prediction – to tell or forecast in advance; to prophesy
- Opinion – a personal view or attitude or perspective; judgement or belief not founded on certainty or proof
- Value Judgement – a subjective assessment based on a code of values; a decision based on moral principles or beliefs; an opinion based on an individual's beliefs or views of what is desirable, important or highly regarded and not upon facts which can be checked or proved
- Fact – something which can be checked or proved; something that is true and which can be verified from experience and observation; a piece of information

The statement could be described as an opinion, value judgement, prediction or consequence, but not a fact.

Value judgement - this is because it considers fairness, which is a value. It is also an opinion – an unverifiable belief held by the speaker. It suggests that if forests were managed by local people then it would become fairer at some point in the future – a prediction. It could be seen as a statement of the effect or result of having forests managed locally – a consequence. It is not a fact because the statement cannot be proved.

Level 3: Strong Response **[3]**

The response demonstrates understanding of two or more features of the statement with clear, accurate explanation for at least one of these features. Only correct understanding/explanations of additional suggested features should be credited.
e.g. It's an opinion because it is a view that we can't tell if it's true or not, and a value judgement because it deals with fairness, which is seen as important for people.

Level 2: Reasonable Response **[2]**

The response demonstrates some understanding of one of the features of this claim with some reasonable explanation that is clear.
e.g. It's an opinion because it is a personal view and we can't tell if it's true or not, and other people might have different views.

Level 1: Basic Response **[1]**

The candidate identifies one feature of the statement but does not explain effectively; the response demonstrates very little or no understanding of the differences between fact, opinion, value judgement, prediction, and consequence.
e.g. It's an opinion because it's not true.

No relevant response or creditworthy material **[0]**

(c) Refer to Source 3. Read Lung Lin Hao's comments in paragraph C. Does Hao's reasoning work well to convince us that 'A better solution would be farmers and governments to leave the forest or re-grow it'?

In your answer you may:

- **consider the reliability of any knowledge claims he makes;**
- **consider how the facts are used;**
- **consider how well Lung Lin Hao answers Arbor Green's points in paragraph B;**
- **consider any other relevant issues.**

Use examples of their words and phrases to support your point of view.

Indicative Content

Lung Lin Hao's statement is:

'But local people are often ignorant and untrained, and do not understand business. They cannot find the best markets, and they often argue amongst themselves. 80% of Mexico's community forests are not managed at all. A better solution would be to pay farmers and governments to leave the forest or re-grow it. China pays farmers $450 a year for each hectare they reforest. Costa Rica pays $45–$163 a hectare to encourage forest conservation. New York pays farmers not to develop their land to preserve the water supply. A number of rich countries, including Norway and Britain, have agreed to give money to a scheme to pay poor countries to keep their forests.'

Possible evaluation of Lung Lin Hao's argument and reasoning:

Lung Lin Hao does give reasons why Arbor Green's idea about communities managing forests won't work, and these are reasons that could be true – it is quite likely that local people lack education and business training. But he doesn't consider that the best option might be to educate and train these communities. So he doesn't fully answer Arbor Green's points.

In the whole argument, Lung Lin Hao seems to believe that money can solve anything, or that it is the solution. We can see his perspective as an economist here. It leads him to ignore other factors such as beliefs, as Arbor Green points out. It also leads him to ignore values such as fairness and benefits to the forest – if 80% of community forests in Mexico are not managed, perhaps they are better off and at least not being cleared.

Lung Lin Hao is an economist, so we would expect him to have expertise and knowledge, so there is no reason to think that his facts (about countries paying farmers) are wrong. But he doesn't use these facts very well. We need to know whether China is reversing deforestation, or whether the rich countries have actually given the money, and whether the poor countries have used it for the right thing. Lung Lin Hao only shows that there are schemes which pay farmers and governments to leave forests, not that these schemes work – and so we can't be sure that they would be a better solution.

Overall, Lung Lin Hao's reasoning works well enough to show that paying farmers and governments might be a useful part of a solution to deforestation, but he doesn't show that it would be a better solution than community management of forests.

Candidates might be expected to refer to **some** of these evaluative points/arguments in their responses, and/or other reasonable points, but not all.

The following levels of response should be used to award marks.

Marks	Description of Performance
Very Good 11–12	Very good, well supported judgements about whether Lung Lin Hao's reasoning works well to convince us of his solution. Coherent, structured evaluation of how well the reasoning works with focus on evaluation of issues including a range of points about knowledge claims, evidence, consequences or values. The response is likely to contain at least 3 developed evaluative points, possibly with some undeveloped points. The response is balanced. A clear assessment or conclusion is reached.
Strong 8–10	Strong, clear judgements about whether Lung Lin Hao's reasoning works well to convince us of his solution. Evaluation of how well the reasoning works with focus on evaluation of issues including some evaluative points about knowledge claims, evidence, consequences or values. The response is likely to contain at least 2 developed evaluative points, possibly with 1/2 undeveloped points. A range (3/4+) of brief but clearly appropriate/explained undeveloped points may be sufficient to enter this band at the lower level. The response is balanced. An overall assessment or conclusion is reached.
Reasonable 5–7	Reasonable judgements about whether Lung Lin Hao's reasoning works well to convince us of his solution. Judgements are likely to be partially supported or asserted. Some evaluation of how well the reasoning works with focus on of issues including some evaluative points about knowledge claims, evidence, consequences or values. The response is likely to contain at least 1 developed evaluative points, possibly with 1/2 undeveloped points.
Basic 3–4	Basic judgements about whether Lung Lin Hao's reasoning works well to convince us of his solution. Judgements are unlikely to be supported and mainly asserted. There is little clarity of argument. Some attempt to evaluate how well the reasoning works with a focus on issues rather than knowledge claims, evidence, consequences or values. The response is likely to contain only 1/2 undeveloped points.
Limited 1–2	Limited, if any, unsupported judgement(s) about whether Lung Lin Hao's reasoning works well to convince us of his solution. There is very little clarity in the argument. The response is likely to repeat the arguments simply or assert agreement/disagreement with the views expressed. The response may not contain any clear evaluative points.
0	No relevant or creditworthy material

4   **Do you think that deforestation is most likely to be reduced by global, local or**
    action?

    In your answer you should:
    *   **give reasons for your opinion;**
    *   **use relevant examples to support your opinion (you may use your own experience);**
    *   **show that you have considered different points of view;**
    *   **explain why you disagreed with some of these points of view.**

    Indicative Content

    Candidates are expected to compare and assess the effectiveness of different forms of action to
    reduce deforestation at global, local and individual levels. A judgement should be made about
    which level(s) of action are the most likely to succeed or work the most. The candidates are
    expected to use and develop the material found in the Sources, but should go beyond simply
    repeating or recycling without adaptation. Other material may be introduced but it is not
    necessary to gain full marks.

    The arguments used to consider different levels of response are likely to include:

    *   reference to scale of impact
    *   how long it takes to make a difference
    *   the effects of cultural differences and beliefs
    *   barriers to change
    *   the power of collective action
    *   the difficulties of changing individual behaviour
    *   the influence of individuals and groups acting locally
    *   the role of vested interests and power differences
    *   potential conflict
    *   difficulties in coordinating globally and across different countries with independence
    *   cost and access to resources to implement change
    *   governmental responses and action
    *   other reasonable response

The following levels of response should be used to award marks.

Marks	Description of Performance
Very Good 16–18	Very good, well supported and logical reasoning and judgements about which type/level of action is most likely to lead to a reduction in deforestation. Coherent, structured argument and evaluation with at least two levels of action compared. The response is likely to contain a range of clearly reasoned arguments and/or evidence to support the views expressed, with at least 3 developed points, and some undeveloped points. The response is balanced. A clear, balanced assessment or conclusion is reached.
Strong 12–15	Strong, supported reasoning and judgements about which type/level of action is most likely to lead to a reduction in deforestation. Some clear argument and evaluation with at least two levels of action compared. The response is likely to contain a range of reasoned arguments and/or evidence to support the views expressed, with at least 2 developed points, and some undeveloped points. The response is balanced. A balanced assessment or conclusion is reached. Lower in the band a greater proportion of arguments will be left undeveloped and there will be uneven treatment of different levels of action.
Reasonable 8–11	Reasonable argument and judgement about which type/level of action is most likely to lead to a reduction in deforestation. The response is likely to contain some arguments and/or evidence to support the views expressed, with at least 1 developed point, and some undeveloped points. An assessment or conclusion is attempted but may not be convincing. Lower in the band some arguments may begin to lack clarity, and/or be partial and generalised.
Basic 4–7	Basic argument about which type/level of action is most likely to lead to a reduction in deforestation. Arguments are unlikely to be supported and mainly asserted. There is little clarity of argument and no structure. Some attempt to make a judgement about the most likely level may be present; it may be implicit. The response is likely to contain only 1/2 undeveloped points. Lower in the band the arguments are likely to be very generalised, lack relevance to the issue and focus on issues of deforestation rather than an explanation of why a level of action is more likely to reduce deforestation; or a list of ways to reduce deforestation at a level without explanation of why these actions are most likely to reduce.
Limited 1–3	Limited, if any, unsupported argument about which type/level of action is most likely to lead to a reduction in deforestation. There is very little clarity in the argument. The response is likely to assert a very simple view or describe deforestation issues very generally. The response may not contain any relevant points about action to reduce deforestation.
0	No relevant or creditworthy material