

MARK SCHEME for the 2006 question paper

CAMBRIDGE INTERNATIONAL DIPLOMA IN ICT

5191A Core Module

This mark scheme is published as an aid to teachers and students, 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.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

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

The grade thresholds for various grades are published in the report on the examination for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses.

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

CIE is publishing the mark schemes for the October/November 2006 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



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Printout of the second e-mail prepared and ready to send to autoresponder-

Check send to address: **design.h@ucles.org.uk**

Check subject line **ICTCOREX**

Check for attachment present **SCA6MANU.TXT**

If candidate has attached file **SCA6AFAS.CSV** instead of SCA6MANU.TXT then allow this

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<Candidates Name>

Name top left of page
Must be in the header

Date top right of page
Must be in the header

<Today's Date>

Phase 3 for Quattichem

A4 page size - Landscape
All margins 3.5 cm
Allow for paper feed inconsistencies with printers –
(the line length must be between 22.5 and 23 cm)

Heading - Centre aligned
24 point, underscored
Different font to body text

...ve decided that the scope of our contract relating to t
new manufacturing plant should be changed. The search location has been amended to include the shortlisted
countries in Africa and several potential host countries in their Asia region. This means that the latest
shortlist of thirty seven countries identified by Quattichem must be investigated as part of this contract.
I have in the last 10 minutes received an e-mail which contains brief details of another three countries
that they would like to be added to the existing list. These are Azerbaijan, Kazakhstan and Laos. A
revised data file which will contain the initial details of all these countries will be collated and
available for use by the end of today.

Please note that the following countries are the prime suppliers of the bulk dry materials used in the
manufacturing processes:

- Thailand
- Indonesia
- South Africa
- Switzerland

Body text left aligned
10 point
1.5 line spacing

Bullet points
Indented at least 2cm
Accept if start of text indented by 2cm from margin

Page break inserted here

Check header and footer
consistent on all pages

Page numbering bottom right
Must be in the footer

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<Candidates Name>

<Today's Date>

Most of these materials will be transported in bulk powder form, so it is essential that good transport links are established or can be established without prohibitive costs. The contract has been extended to include the requirement for approximate costs to be shown, particularly in relation to the enhancement of the transport network in the area as well as an overall budget for the design and construction of the site. Please add a 30% contingency cost to all projected budgets before they are submitted as part of the report.

Recent developments internationally which have banned the use of single hulled oil tankers in some regions of the world must be taken into account. The plant's requirement for heavy crude oil, with an approximate consumption of 6000 barrels a day, will mean that a port taking only the most modern supertankers must be on site or available locally, if the region selected does not have this type of oil locally produced.

Please ensure that the other primary location factors, that is political stability, availability of water and good transport links are also given high priority. Another factor is that a remote location is required, at least 12 kilometres away from any centres of population. We must ensure that we evaluate the physical geography of the location, existing transportation links and the potential for new transportation links, climate, political structures and stability, as well as the other requirements mentioned above. Please identify any potential problems with selecting this location, even if they have not been identified in any of the notes within this document or from the briefing meeting. This will probably be the most critical factor in your report. It must be on a relatively flat area of land in excess of 60000 hectares which must not contain a habitat for any protected species of flora or fauna. Approximately 20000 hectares of the site will be set aside to allow this water to cool back to the natural ambient temperature, before it is returned to the locality.

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<Today's Date>

The new contract also requires us to produce some draft marketing strategies using the environmental aspects. They believe that in a changing global economy, consumers are prepared to pay a little extra to ensure that natural resources are preserved and natural habitats are protected. As Quattichem use large quantities of oil and other resources, there would appear to be a conflict of interests here and they are keen to try and persuade the consumers of their wide range of products of their 'green' credentials.

In light of the changes to the contract, the team has been enlarged. Safraz has been seconded to the team for the next week and will lead the work on the environmental preservation. The existing teams working under David will continue to collect and collate all the relevant information about all countries on the latest list. Sofia's team will initially focus on those countries where annual Imports are greater than 10 AND less than 300 and with a population of less than 3,000,000. The starting point for this team will be the following countries:

Sofia's team will ensure that all potential sites within these countries have been investigated by Tuesday's briefing meeting. By this stage David's team should have all the geographical data on these countries collated and presented, especially those relating to earth movements, earthquakes and any volcanic activity. I appreciate that for some team members it will involve working in unfamiliar areas, but it is essential that we have several options that can be developed into in-depth studies prior to the final deadline on the 15th. New team allocations will be:

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<Candidates Name>

<Today's Date>

Page orientation portrait

Asia Region

Heading 'Asia Region' at the top
Does not have to be in the header and any alignment is acceptable

Country	Region	Population	Density	Energy	Imports	Exports
Afghanistan	Asia	23	35	0.04	19	6
Azerbaijan	Asia	7.7	89	2.6	105	86
Cambodia	Asia	10.5	59	0.02	43	24
Iran	Asia	69.5	42	1.88	537	348
Iraq	Asia	22.5	51	1.76	278	383
Kazakhstan	Asia	17	6	5.93	40	70
Kyrgyzstan	Asia	4.7	24	0.76	71	76
Laos	Asia	5.2	23	0.04	40	20
Mongolia	Asia	2.5	2	1.55	158	208

Sorted in ascending order on 'Country'

Search Region = Asia

Check data entry of Azerbaijan
Kazakhstan & Laos
Must be 100% accurate

Name bottom right of report
Does not have to be at bottom of the page

<Candidate's name>

Heading 'Low density and few imports' at the top
Does not have to be in the header, any alignment is acceptable

Low density and few imports

Only these 4 fields selected
Can be any order or layout

Density	Country	Region	Imports
8	Niger	Africa	37
6	Kazakhstan	Asia	40
5	Central African Republic	Africa	54
			37

Sorted in descending order on 'Density'

Calculated Field
Minimum Imports calculated

<Candidate's name>

Name bottom left of report
Does not have to be at bottom of the page

Search
Density <10 AND Imports < 60

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<Candidates Name>

<Today's Date>

Phase 3 for Quattichem

A4 page size - Portrait
All margins 2 cm
Allow for paper feed
inconsistencies with printers –
(the line length 17 cm)

Heading present
Any alignment, font
or point size, is acceptable



In recent days, Quattichem have decided that the scope of our contract relating to the location of their new manufacturing plant should be changed. The search location has been amended to include the shortlisted countries in Africa and several potential host countries in their 'Asia' region. This means that the latest shortlist of thirty seven countries identified by Quattichem must be included as part of

Image of any building inserted
It may contain construction, planning, tools etc
Placed top left of page
Graphic area no more than 40% of printed page and
no less than 15% of page
Orientation of graphic not important
Text must wrap around all the image

like to be added to the existing Kazakhstan and Laos. A revised data file which will contain the initial details of all these countries will be collated and available for use by the end of today.

Please note that the following countries are the prime suppliers of the bulk dry materials used in the manufacturing processes:

- Thailand
- Indonesia
- South Africa
- Switzerland

Body text fully justified
12 point
single line spacing

Most of the materials will be transported in bulk powder form, so it is **Page break removed** and transport links are established or can be extremely prohibitive costs. The contract has been extended to include the requirement for approximate costs to be shown, particularly in relation to the enhancement of the transport network in the area as well as an overall budget for the design and construction of the site. Please add a 30% contingency cost to all projected budgets before they are submitted as part of the report.

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<Candidates Name>

<Today's Date>

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Country	Region	Population	Imports
Mongolia	Asia	2.5	158
Congo	Africa	2.7	259
Guinea-Bissau	Africa	1.2	66

Database extract placed here
Format of the extract is not important

Searching for
10 < Imports < 300
AND Population < 3

Only these 4 fields selected
Can be arranged in any order or layout

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Sofia's team will ensure that all potential sites within these countries have been investigated by Tuesday's briefing meeting. By this stage David's team should have on these countries collated and pre relating to earth movements, earthquakes and any volcanic activity. I appreciate that for some team members it will involve working in unfamiliar areas, but it is essential that we have several options that can be developed into in-depth studies prior to the final deadline on the 15th. New team allocations will be:

Page numbering moved to bottom centre

David	Sofia	Safraz
Anne	Akiko	Kelvin
Cammilla	William	Jamal
Li	Jo	
Michelle	Gunther	

Table inserted here
 100% accuracy in data entry needed
 Any alignment acceptable

Check for no widows, orphans or lists or tables which overlap two pages