**UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS**

International General Certificate of Secondary Education

# MARK SCHEME for the October/November 2006 question paper

## 0418 INFORMATION TECHNOLOGY

**0418/02**    Paper 2, maximum raw mark 70

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 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.

UNIVERSITY *of* CAMBRIDGE
International Examinations

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

> **Check send to address: <u>design.h@cie.org.uk</u>**    *1 mark*
> **Check subject line ICTCOREX**                          *1 mark*
> **Check for attachment present SCB6MOB.TXT**             *1 mark*

> **From ARF**
> ***Information found using Search Engine and***
> ***File saved***                          *1 mark*

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

Candidate x

# Phoney Phones research notes

...nt consumer profiles has given ... some very interesting results. The younger elements of the potential customer base have clearly iden... d four areas that they consider make the difference between a good phone and the others. These are:

- games
- music
- sports
- camera

In order to identify the key factors which could form the basis of our campaign, we must review these areas. In terms of games, there appear to be two distinct types of player. There is the game addict who will sit for hours magically attracted to the mobile to the exclusion of everything else. The other type of games player is the casual user who wants to kill some time, perhaps on the journey home. The mobile phone now allows users to download and play a range of fantastic games anywhere, at any time. The music element allows the user to download the latest ring tones to their phone, from a variety of sources like websites, MTV or Musiwave. Other downloads in this category are voicemail greetings and messages from pop stars, bands and other celebrities. Depending on the service provider, most mobile phones will provide results, news and gossip from top sporting fixtures around the world. The camera now seems to be firmly embedded into the latest mobile phones, allowing pictures to be taken and sent instantly to friends or family from anywhere in the world. These can be sent to ... to computers. The technology is also available to ...

Page N of N

<today's date>

Candidate x

download hundreds of images and animations from a variety of picture galleries, ranging in content from celebrity sightings to funny cartoons.

Research of the mobile phones currently on the market offers us additional information that can be used in the planning of the advertising campaign. The team needs to be fully aware of the latest updates in the technology and the terminology in use. Picture messaging refers to the ability to send, receive and forward messages, including images, text and sound. The image quality of colour screens varies according to the number of colours built into the screen. The current fascination with ring tones is to have polymorphic ring tones. This means that the phone can play more than a single note at a time. Java is the programming language that enables many of today's mobiles to play the games. GRPS gives the user the always on internet connection which means fast WAP access. This allows the user to access many internet based services. Most of the currently favoured mobiles have speed dial, which means that numbers can be dialled at a single touch. Bluetooth technology allows the mobile user to share data with a computer or to talk hands free without using any connecting wires.

*Page break   inserted here*

*1 mark*

Page N of N

<today's date>

Candidate x

Cost is a critical factor for many customers. The table below shows some sample costs from two of the network providers:

The differences in these costs make it difficult to select a network service provider. If our client advertised some method of simplifying these charges, perhaps in conjunction with a provider, they would be likely to increase their business instantly.

Another method of promoting specific phones might be to identify up to three manufacturers like these and promote their products:

All of these manufacturers have expressed a keen interest to try and create a joint advertising campaign with our client. We will need to do further investigation into a closer working relationship with each of these organisations and then with our client to try and negotiate a joint campaign. It is likely that in the end we , and all staff must be careful in their dealings with these co y will still be providing goods and services to our clients long after this advertising campaign has been completed.

*Body text*     *Fully justified*   *1 mark*
             *12 point*   *1 mark*
             *1.5 line spacing*   *1 mark*
             *Applied to all paragraphs*   *1 mark*

There are several accessories that have been found as potential lead items for the campaign. Nokia have recently introduced a new wireless headset using bluetooth technology. This gives the user hands-free control of their mobile without cables and wires. The earpiece fits inconspicuously in either ear and could make an ideal Christmas promotion. Nokia have also developed a streamlined music stand which may also attract attention from younger consumers. It allows the phone to charge

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&lt;today's date&gt;

## Candidate x

whilst making calls, and can take external devices like a compact disk player or an MP3 player. Those phone users who have already bought a colour phone before the boom in photo messaging may be pleased to see a lightweight digital camera headset that will plug into 5 different models of Nokia phone. The advent of video capture and playback is also worthy of further consideration.

<today's date>

*Page orientation portrait*     *1 mark*
*All fields fully visible*     *1 mark*

Heading as shown at the top
Does not have to be in the header and any alignment is acceptable
*Heading must be 100% correct*     *1 mark*

# Nokia phones in stock

| ID | Make | Model | Weight | Length | Width | Height | Talk time | Standby time | Display |
|----|------|-------|--------|--------|-------|--------|-----------|--------------|---------|
| 51 | Nokia | 8310 | 84 | 97 | 43 | 17 | 135 | 350 | Mono |
| 15 | Nokia | 6310 | 111 | 129 | 47 | 19 | 180 | 480 | Mono |
| 27 | Nokia | 6310i | 111 | 129 | 47 | 21 | 240 | 408 | Mono |
| 5 | Nokia | 7650 | 154 | 114 | 56 | 26 | 240 | 150 | Colour |
| 18 | Nokia | 3410 | 114 | 115 | 49 | 23 | 250 | 260 | Mono |
| 23 | Nokia | 3310 | 133 | 113 | 48 | 22 | 260 | 270 | Mono |
| 52 | Nokia | 6210 | 114 | 130 | 47 | 17 | 270 | 260 | Mono |
| 12 | Nokia | 3330 | 133 | 113 | 48 | 22 | 270 | 260 | Mono |
| 37 | Nokia | 6250 | 174 | 142 | 58 | 27 | 350 | 330 | Mono |
| 50 | Nokia | 9210 | 244 | 158 | 56 | 27 | 600 | 230 | Mono |

*Search*
*Make = 'Nokia'*     *2 marks*

*Sorted in ascending order on*
*'Talk time'*     *2 marks*

Check data entry of 3 records for Nokia
Must be 100% accurate
*Data entered as specified*     *3 marks*
1 mark per record

*Candidate x*

Name bottom right of report
Does not have to be at bottom of the page
*Position of name*     *1 mark*

Heading as shown at the top
Does not have to be in the header, any alignment is acceptable
*Heading must be 100% correct*     *1 mark*

Search for Height <22 AND Display = Colour
Check these 3 records
*Search*     *2 marks*

Only these 4 fields selected
Can be any order or layout
*4 fields fully visible*     *1 mark*

# Thin colour phones

| Make | Model | Weight | Height |
|------|-------|--------|--------|
| Sagem | myX-5 | 92 | 20 |
| Philips | Fisio 820 | 85 | 21 |
| Ericsson | T68 | 84 | 20 |
| *Average* | | 87 | |

*Sorted in descending order on 'Make'*
*Sort*     *2 marks*

Calculated Field
Average weight calculated. Does not require a label
*Calculated control correct.*     *2 marks*
*Position of calculated control below weight column*     *1 mark*

*Candidate x*

Name bottom left of report
Does not have to be at bottom of the page
*Position of name*     *1 mark*

Candidate x

# Phoney Phones research notes

The younger elements of the potential customer base have clearly identified four areas that they consider make the difference between a good phone and the others.  These are:

- games
- music
- sports
- camera

In order to identify the key factors which could form the basis of our campaign, we must review these areas.  In terms of games, there appear to be two distinct types of player.  There is the game addict who will sit for hours magically attracted to the mobile to the exclusion of everything else.  The other type of games player is the casual user who wants to kill some time, perhaps on the journey home.  The mobile phone now allows users to download and play a host of fantastic games anywhere, at any time.  The music element allows the user to download the latest ring tones to their phone, websites, MTV or Musiwave.  Other download voicemail greetings and messages from celebrities.  Depending on the service will provide results, news and gossip around the world.  The camera now seen latest mobile phones, allowing pictures to friends or family from anywhere in other picture messaging mobiles or to also available to download hundreds of images and animations from a variety of picture galleries, ranging in content from celebrity sightings to funny cartoons.

Research of the mobile phones currently on the market offers us additional information that can be used in the planning of the advertising campaign.  The team needs to be fully aware of the latest updates in the technology and the terminology in use.  Picture messaging mobiles to receive and forward messages, including different screens.  The image quality of colour screens varies with the number of colours built into the screen.  The currently favoured ring tones is to have polymorphic ring tones.  This means that the phone can play more than a single note at a time. Java is the programming language that enables many of today's mobiles to play the games.  GRPS gives the user the always on internet connection which means fast WAP access.  This allows the user to access many internet based services.  Most of the currently favoured mobiles have speed dial, which means that numbers can be dialled at a single touch.  Bluetooth technology allows the mobile user to share

Candidate x

*Page break removed          1 mark*

*Table inserted in correct place          1 mark*
*100% accuracy in data entry          1 mark*
Any alignment acceptable
*5 rows and 3 columns          1 mark*

data with a computer or to talk hands free without
connecting wires.

Cost is a critical factor for many customers.  The table below shows
some sample costs from two of the network providers:

| Charges | Provider A | Provider B |
|---|---|---|
| Text | 12p per message | 5p per message |
| Mobile to mobile | 20p | 40p |
| Answerphone | 10p | 15p |
| WAP | 10p | 6p |

The differences in these costs make it difficult to select a network
service provider.  If our client advertise

**Database extract placed here**
Format of the extract is not important
*Placing of extract in relation to text within*
*margins 5 mm tolerance          1 mark*

these charges, perhaps in conjunction with
likely to increase their business instantly

Another method of promoting specific phones might be to identify up to
three manufacturers like these and promote their products:

| Make | Model | Talk time | Standby time |
|---|---|---|---|
| Alcatel | One Touch 501 | 270 | 220 |
| Philips | Fisio 311 | 270 | 320 |
| Philips | Fisio 820 | 330 | 400 |
| Sendo | D800 | 180 | 300 |
| Sendo | P200 | 390 | 360 |
| Sendo | S230 | 210 | 360 |

*Only these 4 fields selected          1 mark*
*All data and labels visible          1 mark*
Can be arranged in any order or layout

All of these manufacturers have expressed
create a joint advertising campaign with our c
do further investigation into a closer working
of these organisations and then meet with our client to try and
negotiate a joint campaign.  It is likely that in the end we will
select only one of the three, and all staff must be careful in their
dealings with these companies to promise nothing, as they will still
be providing goods and services to our clients long after this
advertising campaign has been completed.

**Searching for**
**Alcatel, Philips or Sendo**
*Sorted ascending on Make          2 marks*
*Search          2 marks*

There are several accessories that have been found as potential lead
items for the campaign.  Nokia have recently introduced a new wireless
headset using bluetooth technology.  This gives the user hands-free
control of their mobile without cables and wires.  The earpiece fits
inconspicuously in either ear and could make an ideal Christmas
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may also attract attention from younger consumers.  It allows the
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like a compact disk player or an MP3 player.  Those phone users who
have already bought a colour phone before the boom in photo messaging
may be pleased to see a lightweight digital camera headset that will
plug into 5 different models of Nokia phone.  The advent of video
capture and playback is also worthy of further consideration.

*No widows or orphans          1 mark*
*No split lists or tables          1 mark*
*Document complete and spell checked with paragraphing intact          1 mark*

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