Cambridge Assessment International Education
Cambridge International General Certificate of Secondary Education

INFORMATION AND COMMUNICATION TECHNOLOGY **0417/31**

Paper 3 Practical Test B **March 2019**

MARK SCHEME

Maximum Mark: 80

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.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the March 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

This syllabus is regulated for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

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.

Evidence 1

4 from:
Text can't be read by age group
Text too small
Too many colours
Complex text – turquoise
Not intuitive / better to click on colour
Text reader relates sound to word

4 marks

Evidence 2

1 mark each:

a) presentation
b) structure/content
c) presentation
d) behaviour

4 marks

Evidence 3

GGG_html folder	
Screen shot (includes image dimensions)	1
Lilac1.jpg reduced to 672 × 896	1
Lilac2.jpg reduced to 271 × 896	1

Evidence 4

Browser	In browser with address bar	
	no letters vis	1
Table	Borders visible	1
	Left aligned in browser	1
	Background logo visible	1
	Placed in top right corner	1
Top cell	Spring flowering trees and shrubs	
	100% accurate	1
	In h1	1
1st column	Correct images:	
	4 correct for 2 marks	
	3 correct for 1 mark	2
2nd column	Apple, Camellia, Cherry, Forsythia	1
	In h2	1
3rd column	Left and right removed from image	1
6th row	Text from file GGGtext.txt	
	& cand details	1
	in h3	1

Evidence 5

```
<!DOCTYPE html>
<html>
 <head>
  <link rel="stylesheet" type=”text/css” href="GGGstyle.css">
  <link rel="stylesheet" type=”text/css” href="GGG9999.css">
 </head>
 <body>

   <table style="margin-right:auto; width:800px;">


    <tr style="height:100px;">

      <td colspan=3>
        <h1>Spring flowering trees and shrubs</h1>
      </td>
    </tr>

    <tr style="height:225px;">
      <td style="width:300px;">
      <img src="apple.jpg" alt="Image of an apple tree" width=290px>
      </td>
      <td style="width:225px;">
      <h2>Apple</h2>
      </td>

       <td style="width:275px;" rowspan=4>
      <img src="Lilac2.jpg" alt="Image of a lilac tree" width=290px>
      </td>
     </tr>
     <tr style="height:225px;">
```

Head section		
GGGstyle.css attached		1
GGG9999.css created and attached		1
Table	width 800px	1
Top row	Set to 100px high	1
td	colspan=3	1
Row 2	height:225px	1
Cell 1	width:300px	1
Cell 2	width:225px	1
Cell 3	width:275px	1
	rowspan=4	1
Rows 3–5	height:225px	1

```
       <td style="width:300px;">
      <img src="camellia.jpg" alt="Image of a camellia shrub" width=290px>
      </td>
      <td style="width:225px;">
      <h2>Camellia</h2>
      </td>
     </tr>
     <tr style="height:225px;">
      <td style="width:300px;">
      <img src="cherry.jpg" alt="Image of a cherry tree" width=290px>
      </td>
      <td style="width:225px;">
      <h2>Cherry</h2>
      </td>
     </tr>
     <tr style="height:225px;">
      <td style="width:300px;">
      <img src="forsythia.jpg" alt="Image of a forsythia shrub"
width=290px>
      </td>
      <td style="width:225px;">
      <h2>Forsythia</h2>
      </td>
     </tr>
     <tr style="height:150px;">
      <td colspan=3>
        <h3>We stock a range of spring flowering trees and shrubs suitable
for most habitats. Our expert, A Candidate, ZZ999, 9999, will help you to
identify the best trees and shrubs for your location. Use this <a
href="mailto:hothouse-
design@cambridgeinternational.org?subject=Ask%20the%20expert">link</a> to
email them.</h3>
      </td>
     </tr>
   </table>
 </body>
</html>
```

All 5 images		
Resized to 290px wide and aspect ratio		1

Row 6	Height:150px	1
	Colspan=3	1

Hyperlink	
Anchor from word link	1
Href="mailto:	1
hothouse-design@cambridgeinternational.org	1
?subject=	1
Ask the expert"	1

Alt attribute	
Appropriate alt text for all images	1

Evidence 6:

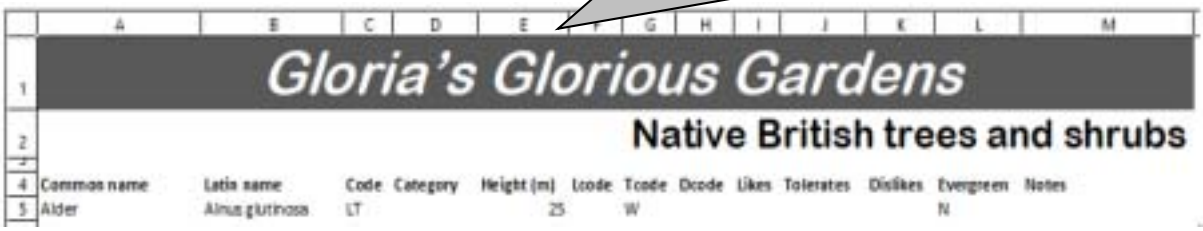
CSS		
At end	Name and cand details as comment	1
body	background-image: url("GGGlogo.png");	1
	background-repeat: no-repeat;	1
	background-position: right top;	1
table,td	{border-style: solid; border-width: 2px}	1

```
body        {background-image: url("GGGlogo.png");
             background-repeat: no-repeat;
             background-position: right top;}
table,td    {border-style: solid; border-width: 2px;}
table       {margin-left: 0cm;}

/*A candidate, ZZ999, 9999*/
```

Trees9999		
	3 new rows at top of spreadsheet	1
Merged	A1 to M1 and A2 to M2	1
Row 1	Sans-serif centre aligned, white font, italic,100% accurate	1
	Dark grey background	1
	Row 1 font > height of row 2 font	1
Row 2	Sans-serif right aligned, bold, 100% accurate	1
	Row 2 font at least 2× height of row 4 font	1
Row 3	Row height less than half row 4	1
Row 4	Bold	1
Screen shot	A1 to M5 – Row and column headings and fully visible	1

Evidence 7



Header	Candidate details on right	1

A Candidate ZZ999 9999

Cell D5	VLOOKUP (…)	1
	Reference to cell C5 (Code)	1
	Category.csv!$A$2:$B$7	1
	As absolute reference	1
	,2,False or ,2,0	1

	A	B	D	
1				
2				
3				
4	**Common name**	**Latin name**	**Category**	**Height (m)**
5	Alder	Alnus glutinosa	=VLOOKUP(C5,Category.csv!$A$2:$B$7,2,0)	25
6	Silver birch	Betula pendula	=VLOOKUP(C6,Category.csv!$A$2:$B$7,2,0)	25
7	Hornbeam	Carpinus betulus	=VLOOKUP(C7,Category.csv!$A$2:$B$7,2,0)	25
8	Beech	Fagus sylvatica	=VLOOKUP(C8,Category.csv!$A$2:$B$7,2,0)	25
9	Ash	Fraxinus excelsior	=VLOOKUP(C9,Category.csv!$A$2:$B$7,2,0)	30
10	Holly	Ilex aquifolium	=VLOOKUP(C10,Category.csv!$A$2:$B$7,2,0)	25
11	Scots pine	Pinus sylvestris	=VLOOKUP(C11,Category.csv!$A$2:$B$7,2,0)	30
12	black poplar	Populus nigraÿsubsp.ÿbetulifolia	=VLOOKUP(C12,Category.csv!$A$2:$B$7,2,0)	35
13	Sessile oak	Quercus petraea	=VLOOKUP(C13,Category.csv!$A$2:$B$7,2,0)	30
14	English oak	Quercus robur	=VLOOKUP(C14,Category.csv!$A$2:$B$7,2,0)	35
15	White willow	Salix alba	=VLOOKUP(C15,Category.csv!$A$2:$B$7,2,0)	25
16	Crack willow	Salix fragilis	=VLOOKUP(C16,Category.csv!$A$2:$B$7,2,0)	25
17	Small-leaved lime	Tilia cordataÿ	=VLOOKUP(C17,Category.csv!$A$2:$B$7,2,0)	25
18	Large-leaved lime	Tilia platyphyllosÿ	=VLOOKUP(C18,Category.csv!$A$2:$B$7,2,0)	30
19	Wych elm	Ulmus glabraÿ	=VLOOKUP(C19,Category.csv!$A$2:$B$7,2,0)	35
20	Small-leaved elm	Ulmus minorÿ	=VLOOKUP(C20,Category.csv!$A$2:$B$7,2,0)	30
21	Plot's elm	Ulmus plotiiÿ	=VLOOKUP(C21,Category.csv!$A$2:$B$7,2,0)	30
22	English elm	Ulmus proceraÿ	=VLOOKUP(C22,Category.csv!$A$2:$B$7,2,0)	40
23	Downy birch	Betula pubescensÿ	=VLOOKUP(C23,Category.csv!$A$2:$B$7,2,0)	20
24	Hawthorn	Crataegus monogynaÿ	=VLOOKUP(C24,Category.csv!$A$2:$B$7,2,0)	10
25	Aspen	Populus tremulaÿ	=VLOOKUP(C25,Category.csv!$A$2:$B$7,2,0)	20
26	Wild cherry	Prunus aviumÿ	=VLOOKUP(C26,Category.csv!$A$2:$B$7,2,0)	20
27	Bird cherry	Prunus padusÿ	=VLOOKUP(C27,Category.csv!$A$2:$B$7,2,0)	15
28	Goat willow	Salix capreaÿ	=VLOOKUP(C28,Category.csv!$A$2:$B$7,2,0)	10
29	Bay willow	Salix pentandraÿ	=VLOOKUP(C29,Category.csv!$A$2:$B$7,2,0)	10

D:\CIE\0417\2019\March 2019\Worked\Trees_ZZ999_9999.xlsx

A Candidate ZZ999 9999

Gloria's Glorious Gardens

	Likes	Tolerates
5	=IF(F5<>"",VLOOKUP(F5,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G5<>"",VLOOKUP(G5,TreeCodes.csv!$A$2:$B$9,2,0),"")
6	=IF(F6<>"",VLOOKUP(F6,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G6<>"",VLOOKUP(G6,TreeCodes.csv!$A$2:$B$9,2,0),"")
7	=IF(F7<>"",VLOOKUP(F7,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G7<>"",VLOOKUP(G7,TreeCodes.csv!$A$2:$B$9,2,0),"")
8	=IF(F8<>"",VLOOKUP(F8,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(
9	=IF(F9<>"",VLOOKUP(F9,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(
10	=IF(F10<>"",VLOOKUP(F10,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(
11	=IF(F11<>"",VLOOKUP(F11,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(
12	=IF(F12<>"",VLOOKUP(F12,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(
13	=IF(F13<>"",VLOOKUP(F13,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(
14	=IF(F14<>"",VLOOKUP(F14,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(
15	=IF(F15<>"",VLOOKUP(F15,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G15<>"",VLOOKUP(G15,TreeCodes.csv!$A$2:$B$9,2,0),"")
16	=IF(F16<>"",VLOOKUP(F16,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G16<>"",VLOOKUP(G16,TreeCodes.csv!$A$2:$B$9,2,0),"")
17	=IF(F17<>"",VLOOKUP(F17,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G17<>"",VLOOKUP(G17,TreeCodes.csv!$A$2:$B$9,2,0),"")
18	=IF(F18<>"",VLOOKUP(F18,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G18<>"",VLOOKUP(G18,TreeCodes.csv!$A$2:$B$9,2,0),"")
19	=IF(F19<>"",VLOOKUP(F19,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G19<>"",VLOOKUP(G19,TreeCodes.csv!$A$2:$B$9,2,0),"")
20	=IF(F20<>"",VLOOKUP(F20,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G20<>"",VLOOKUP(G20,TreeCodes.csv!$A$2:$B$9,2,0),"")
21	=IF(F21<>"",VLOOKUP(F21,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G21<>"",VLOOKUP(G21,TreeCodes.csv!$A$2:$B$9,2,0),"")
22	=IF(F22<>"",VLOOKUP(F22,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G22<>"",VLOOKUP(G22,TreeCodes.csv!$A$2:$B$9,2,0),"")
23	=IF(F23<>"",VLOOKUP(F23,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G23<>"",VLOOKUP(G23,TreeCodes.csv!$A$2:$B$9,2,0),"")
24	=IF(F24<>"",VLOOKUP(F24,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G24<>"",VLOOKUP(G24,TreeCodes.csv!$A$2:$B$9,2,0),"")
25	=IF(F25<>"",VLOOKUP(F25,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G25<>"",VLOOKUP(G25,TreeCodes.csv!$A$2:$B$9,2,0),"")
26	=IF(F26<>"",VLOOKUP(F26,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G26<>"",VLOOKUP(G26,TreeCodes.csv!$A$2:$B$9,2,0),"")
27	=IF(F27<>"",VLOOKUP(F27,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G27<>"",VLOOKUP(G27,TreeCodes.csv!$A$2:$B$9,2,0),"")
28	=IF(F28<>"",VLOOKUP(F28,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G28<>"",VLOOKUP(G28,TreeCodes.csv!$A$2:$B$9,2,0),"")
29	=IF(F29<>"",VLOOKUP(F29,TreeCodes.csv!$A$2:$B$9,2,0),"")	=IF(G29<>"",VLOOKUP(G29,TreeCodes.csv!$A$2:$B$9,2,0),"")

Cell I5	=IF(…)	1
	F5<>""	1
	VLOOKUP (F5, …)	1
	TreeCodes.csv!$A$2:$B$9,2,0	1
	,""	1
	Working formulae in J5 and K5	1

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A Candidate ZZ999 9999

Native British trees and shrubs

	Dislikes	Evergreen	Notes
5	=IF(H5<>"",VLOOKUP(H5,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	
6	=IF(H6<>"",VLOOKUP(H6,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	attractive white bark
7	=IF(H7<>"",VLOOKUP(H7,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	good for hedging
8	=IF(H8<>"",VLOOKUP(H8,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	good for hedging and chalky soils
9	=IF(H9<>"",VLOOKUP(H9,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	seeds freely
10	=IF(H10<>"",VLOOKUP(H10,TreeCodes.csv!$A$2:$B$9,2,0),"")	Y	attractive berries on female forms
11	=IF(H11<>"",VLOOKUP(H11,TreeCodes.csv!$A$2:$B$9,2,0),"")	Y	good specimen tree
12	=IF(H12<>"",VLOOKUP(H12,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	pollution-tolerant
13	=IF(H13<>"",VLOOKUP(H13,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	good specimen tree
14	=IF(H14<>"",VLOOKUP(H14,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	
15	=IF(H15<>"",VLOOKUP(H15,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	
16	=IF(H16<>"",VLOOKUP(H16,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	
17	=IF(H17<>"",VLOOKUP(H17,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	
18	=IF(H18<>"",VLOOKUP(H18,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	prefers chalky soil
19	=IF(H19<>"",VLOOKUP(H19,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	susceptible to Dutch elm disease
20	=IF(H20<>"",VLOOKUP(H20,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	susceptible to Dutch elm disease
21	=IF(H21<>"",VLOOKUP(H21,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	susceptible to Dutch elm disease
22	=IF(H22<>"",VLOOKUP(H22,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	susceptible to Dutch elm disease
23	=IF(H23<>"",VLOOKUP(H23,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	
24	=IF(H24<>"",VLOOKUP(H24,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	attractive berries
25	=IF(H25<>"",VLOOKUP(H25,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	tolerant of most soils
26	=IF(H26<>"",VLOOKUP(H26,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	attractive flowers and fruits
27	=IF(H27<>"",VLOOKUP(H27,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	fragrant flowers
28	=IF(H28<>"",VLOOKUP(H28,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	yellow catkins on male trees
29	=IF(H29<>"",VLOOKUP(H29,TreeCodes.csv!$A$2:$B$9,2,0),"")	N	showy catkins on male trees

Replication	all 4 columns	1
Hidden	Columns C, F, G, H	1

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Footer	Correct Auto file name and path on left	1
Printout	Landscape, rows 1–29, row and col and fully visible	1

A Candidate ZZ999 9999

	A	I	J	K	L	M
1	**Gloria's Glorious Gardens**					
2	**Native British trees and shrubs**					
3						
4	**Common name**	**Likes**	**Tolerates**	**Dislikes**	**Evergreen**	**Notes**
40	Strawberry tree				Y	Attractive flowers, fruit and bark
41	Box	Alkaline soil			Y	prefers partial shade
89	Gorse	Pollution			Y	
90	Western gorse	Acid soil	Sandy soil		Y	thrives in sandy acid soil

Search

Large or medium shrub or small tree	1
AND evergreen	1
Single page, fully visible, with blank cells with no error messages	1
These columns only	1

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