



**Cambridge Assessment International Education**  
Cambridge International General Certificate of Secondary Education

---

**INFORMATION AND COMMUNICATION TECHNOLOGY**

**0417/31**

Paper 3 Practical Test B

**May/June 2018**

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 May/June 2018 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

IGCSE™ is a registered trademark.

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

---

This document consists of **11** printed pages.

**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:**

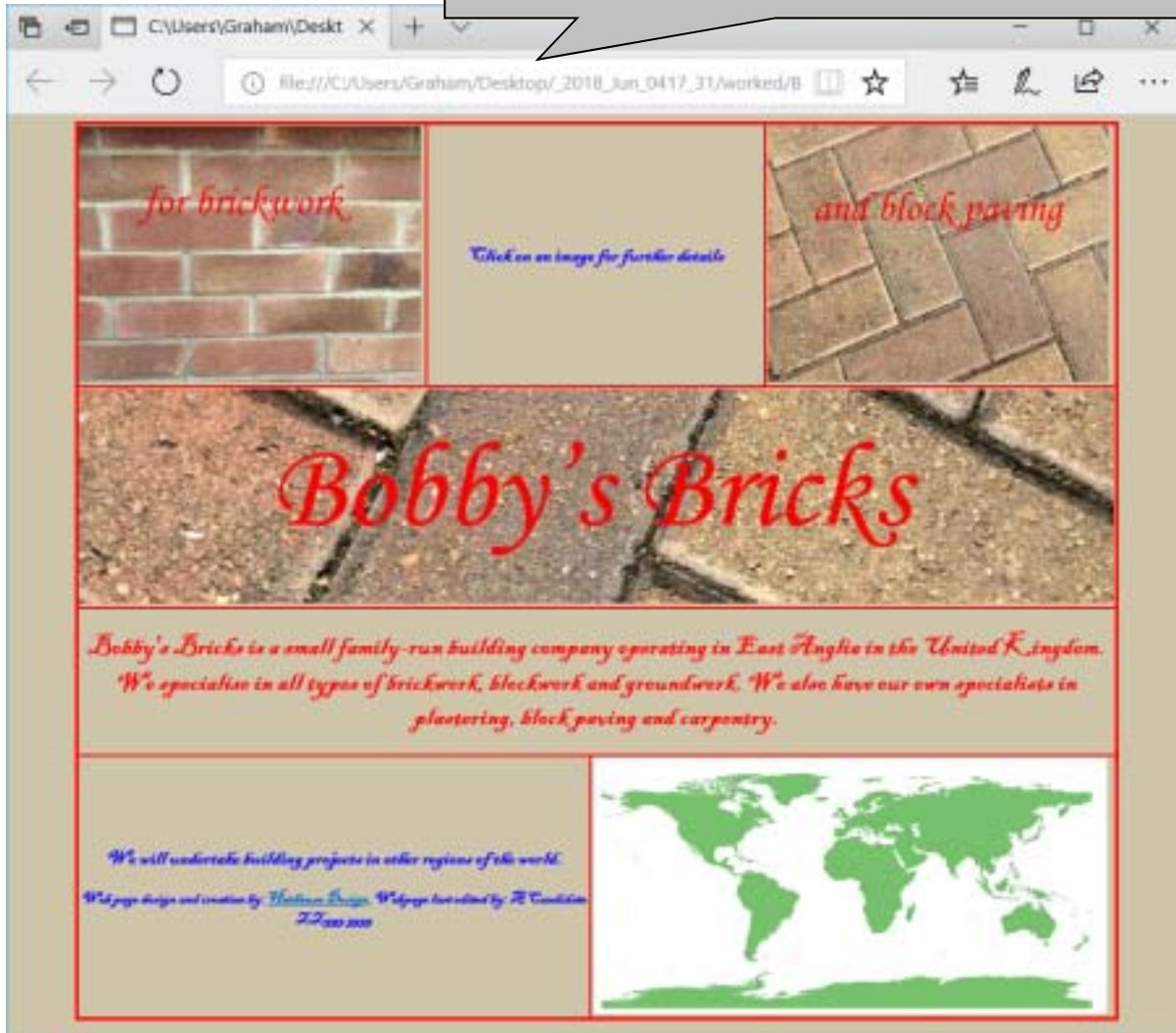
Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

**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**

Browser view	In browser with no letters vis	1
Table	borders and gridlines visible	1
	Centre aligned in window	1
Top left	Brickwork image	1
Top centre	Correct text 100% accurate	1
	In h2	1
Top right	paving.jpg image placed	1
	Resized to match left image	1
Third row	Text from file BBtext1.txt	1
	In h1	1
Last row left	Text placed with candidates details	
	at end, first para in h2 & rest in h3	1
Last row right	Image BBmap.png placed	1



## Evidence 2

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<link rel="stylesheet" href="BBstyle.css">
```

```
</head>
```

```
<body>
```

Head section

Stylesheet BBstyle.css attached

1

width:1200px

1

```
<table border="1" style="margin-left:auto; margin-right:auto; width:1200px;">
```

Top row height:300

1

```
<tr style="height:300px;">
```

```
<td style="width:400px;">
```

```
</td>
```

Cell 1 width:400

1

```
<td colspan=2 style="width:400px;"><h2>Click on an image for further details</h2>
```

```
</td>
```

Cell 2 colspan=2

1

width:400

1

```
<td style="width:400px;">
```

```
</td>
```

Cell 3 width:400

1

```
</tr>
```

Row 2 height:250

1

```
<tr style="height:250px;">
```

```
Hyperlink From BBlogo.jpg to href="BBcontact.htm" 1
Target = "_new" 1
```

```
<td colspan=4><a href="BBcontact.htm" target="_new"></a>
```

```
</td>
```

```
</tr>
```

Rows 2 &amp; 3 colspan=4

1

Row 3 height:150

1

```
<tr style="height:150px;">
```

```
<td colspan=4><h1>Bobby's Bricks is a small family-run building company operating in East Anglia in the United Kingdom. We specialise in all types of brickwork, blockwork and groundwork. We also have our own specialists in plastering, block paving and carpentry. </h1>
```

```
</td>
```

```
</tr>
```

Row 4 height:300

1

Both cells colspan=2

1

```
<tr style="height:300px;">
```

```
<td colspan=2 style="width:600px;"><h2>We will undertake building projects in other regions of the world. </h2><h3>Web page design and creation by: <a href="http://www.hothouse-design.co.uk" target="_self">Hothouse Design</a>. Web page last edited by: A Candidate ZZ999 9999</h3>
```

```
</td>
```

```
Hyperlink From Hothouse Design only
href=http://www.hothouse-design.co.uk 1
target="_self" 1
```

```
<td colspan=2 style="width:600px;">
</td>
</tr>
```

Alt attribute appropriate alt text for all 4 images 1

```
</table>
</body>
</html>
```

h1, h2, h3 all have priority font as Zapf Chancery 1  
 ... then secondary font as Blackadder ITC 1  
 ... then serif 1  
 "Zapf Chancery" and "Blackadder ITC" both in speech marks 1  
 h1, h2, h3 all have text-align:center 1  
 Fonts and text-align applied once to all 3 styles 1

**Evidence 3**

```
body { background-color: #cfc5ab}
h1,h2,h3 { font-family: "Zapf Chancery","Blackadder ITC",serif;
text-align: center;}
h1 { color: #ff0000;}
h2,h3 { color: #0000ff;}
```

h1 color:#ff0000 1  
 h2,h3 color:#0000ff 1

Table border 4px and cell border 2px 1  
 Table,td Border-color: #ff0000 1

```
table,td { border-color: #ff0000; border-collapse: collapse; border-style:solid;}
table {border-width: 4px; }
td {border-width: 2px;}
```

**Evidence 4**

- 4 from:
- Fonts match the style in company logo
  - Fonts may be part of corporate house style.
  - Font colour matches that in logo for style h1.
  - Fonts are script fonts so are more difficult to read.
  - Poor contrast between text & background

(1 mark for each)

**Evidence 5**

- a) \*
- b) /
- c) ^
- d) <>

**Evidence 6**

- Rows 1 and 2**
- A1 to C1 and A2 to C2 merged 1
- Sans-serif centre aligned, black font 1
- Grey background 1
- Row 1 font 2× height of row 2 1
- Row 3**
- Row height less than half row 4 1
- Column A in rows 4-11**
- Sans-serif right aligned 1
- Sheet**
- A1:C12 fully visible incl row and column headings 1

	A		C
1	<b>Bobby's Bricks</b>		
2	<b>Cost estimator for brick walls</b>		
3			
4	Thickness of wall - single skin or double skin?		Please enter S or D
5	Length of wall will be:		Length in centimetres
6	Height of wall will be:		Height in centimetres
7	Type of brick chosen		Please enter brick code
8			
9	You are planning a wall made from		bricks
10	The wall will be		skin
11	You will need to buy		bricks
12			

**Evidence 7**

- Validation rule restricts either the letter S or the letter D* 1
- Validation rule restricts to allow only S or D* 1



A Candidate Z2999 9999

A	
1	
2	
3	
4	Thickness of wall - single skin or double skin?
5	Length of wall will be:
6	Height of wall will be:
7	Type of brick chosen
8	
9	You are planning a wall made from
10	The wall will be
11	You will need to buy

Header	Candidate details in centre	1
--------	-----------------------------	---

Footer	Automated filename with path on right	1
--------	---------------------------------------	---

D:\CI\0417\2018\1831\_Z2999\_9999.xlsx



A Candidate Z2999 9999

	B
1	<b>Bobby's Bricks</b>
2	<b>Cost estimator for brick walls</b>
4	S
5	100
6	100
7	B
8	
9	=VLOOKUP(\$B\$7,j1831bricks.csv!\$A\$2:\$B\$16,2,FALSE)
10	=IF(B4="S","single","double")
11	=ROUNDUP(50+1.1*IF(B4="S",{B5*B6}/(VLOOKUP(B7,j1831bricks.csv!\$A\$2:\$D\$16,4,FALSE)),2*(B5*B6)/(VLOOKUP(B7,j1831bricks.csv!\$A\$2:\$D\$16,4,FALSE))),0)

Cell B9  
 =VLOOKUP( ... ) function and brackets 1  
 Reference to cell B7 (brick code) 1  
 Correct range of data from j1831bricks.csv for code 1  
 Correct return column 1  
 False parameter 1

Cell B10  
 IF function used with ( ) and correct syntax 1  
 Condition e.g. B4="S" 1  
 correct response e.g. "single" in speech marks 1  
 default response e.g. "double" 1

Cell B11  
 =ROUNDUP( ... ) function and brackets 1  
 ,0 to zero decimal places 1  
 50+ 1  
 1.1\*( ... ) 1  
 IF(B4="S", 1  
     **Core calculation**  
 (B5\*B6) 1  
 /VLOOKUP(B7, ... ) 1  
 j1831bricks.csv!\$A\$2:\$D\$16,4,FALSE) 1  
**IF not S**  
 ,2\* Core calculation ) 1

Landscape, row and column heads and all contents fully visible 1

D:\C\0417\2018\j1831\_Z2999\_9999.xlsx



A Candidate Z2999 9999

	C
1	
2	
3	
4	Please enter S or D
5	Length in centimetres
6	Height in centimetres
7	Please enter brick code
8	
9	bricks
10	skin
11	bricks

D:\CI\0417\2018\j1831\_Z2999\_9999.xlsx

A Candidate ZZ999 9999

	A	B	C
1	<h1 style="text-align: center;">Bobby's Bricks</h1> <h2 style="text-align: center;">Cost estimator for brick walls</h2>		
2			
3			
4	Thickness of wall - single skin or double skin? S		Please enter S or D
5	Length of wall will be:	400	Length in centimetres
6	Height of wall will be:	60	Height in centimetres
7	Type of brick chosen V		Please enter brick code
8			
9	You are planning a wall made from	Valley Stone	bricks
10	The wall will be	single	skin
11	You will need to buy	239	bricks

Data as shown	1
Single page and fully visible with no excessive spaces	1

A Candidate ZZ999 9999

<b>Bobby's Bricks</b>		
<b>Cost estimator for brick walls</b>		
Thickness of wall - single skin or double skin?	D	Please enter S or D
Length of wall will be:	400	Length in centimetres
Height of wall will be:	50	Height in centimetres
Type of brick chosen	V	Please enter brick code
You are planning a wall made from Valley Stone bricks		
The wall will be double skin		
You will need to buy	365	bricks

Data as shown, single page and fully visible

1