



# Cambridge IGCSE™

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**INFORMATION AND COMMUNICATION TECHNOLOGY**

**0417/31**

Paper 3 Practical Test B

**March 2021**

MARK SCHEME

Maximum Mark: 80

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**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 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

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This document consists of **9** 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:**

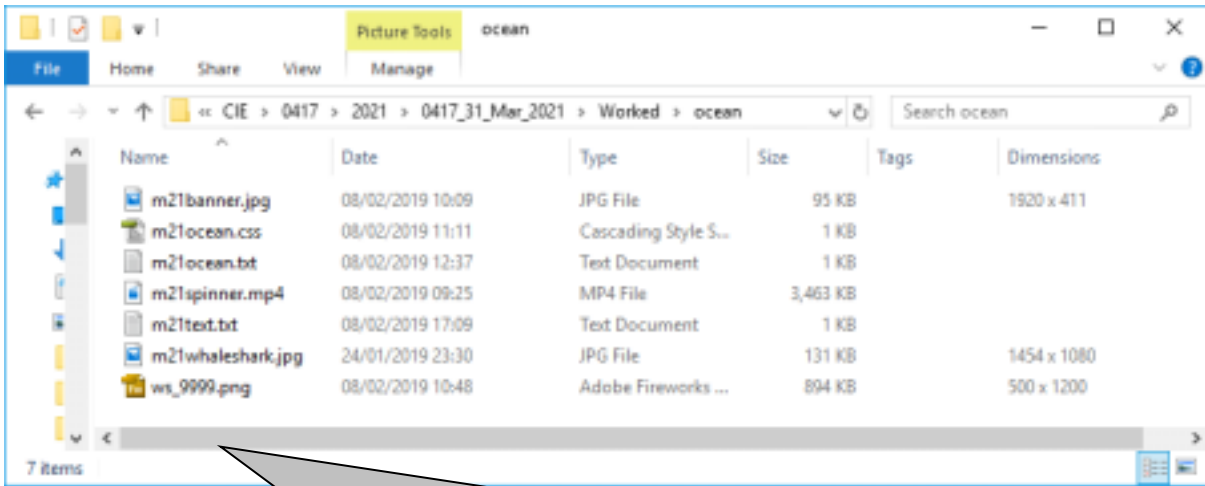
Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

**GENERIC MARKING PRINCIPLE 5:**

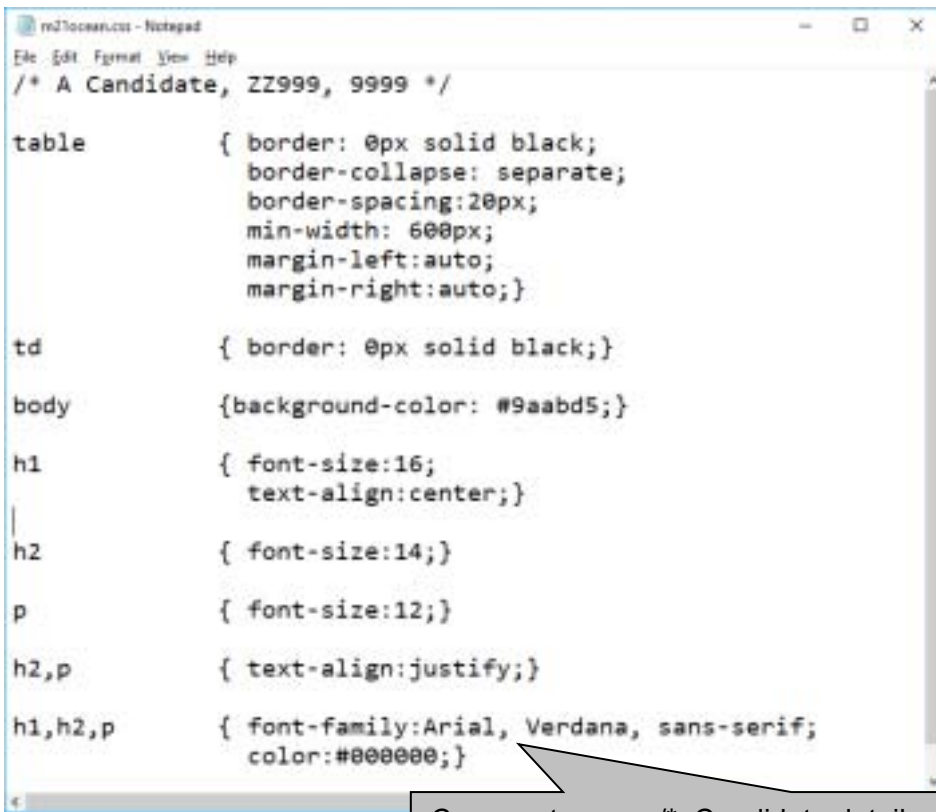
Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

**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.



Screen shot	folder name, file names, dimensions, extensions, file sizes	1 mark
ws_9999	Cropped to 500 x 1200	1 mark
	ws_9999 in PNG format	1 mark



Comment	/* Candidate details at top */	1 mark
table:	margin-left:auto	1 mark
	margin-right:auto	1 mark
body	background-color: #9aabd5	1 mark
h1,h2,p { }	font-family: Arial	1 mark
	, Verdana	1 mark
	, sans-serif	1 mark
	color: #000000	1 mark
	All 3 using single selector	1 mark
h1 {...}	text-align:center;	1 mark
h2, p {...}	text-align:justify;	1 mark
CSS syntax	Correct css syntax	1 mark

```

<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet" type="text/css" href="m21ocean.css">
  </head>
  <body>
    <table style="width:80%;">
      <tr>
        <td colspan="4" style="height:15%;>
          
        </td>
      </tr>
      <tr>
        <td colspan="3" style="width:75%; height:45%;>
          <video width="100%" >
            <source src="m21spinner.mp4" type="video/mp4">
            Your browser does not support this video file type.
          </video>
        </td>
        <td rowspan="3" style="width:25%; height:20%;>
          
        </td>
      </tr>
      <tr>
        <td colspan="3" style="height:10%;>
          <p>Above: Spinner dolphins in the Indian Ocean outside North Male
          Atoll in the Maldives.</p>
          <p>Right: Whale shark in Huvadhoo Atoll in the Maldives.</p>
          <p>Web page updated by: A Candidate, ZZ999, 9999</p>
        </td>
      </tr>
      <tr>
        <td style="width:25%; height:20%;>
          <h1>Species</h1>
        </td>
        <td style="width:25%;>
          <h1>Ocean waste</h1>
        </td>
      </tr>
    </table>
  </body>
</html>

```

Stylesheet	m21ocean.css attached	1 mark
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Table	width 80%	1 mark
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Row 1	height 15%	1 mark
	colspan=4	1 mark

Row 2 left	colspan="3"	1 mark
	width 75%	1 mark
	height 45%	1 mark
	video <...> tag used ...	1 mark
	... width="100%"	1 mark
	source<...> tag used ...	1 mark
	... src="m21spinner.mp4"	1 mark
	type="video/mp4"	1 mark
	Appropriate error message	1 mark
	</video>	1 mark

Row 2 right	rowspan="3"	1 mark
-------------	-------------	--------

Images	width of both still images 100%	1 mark
	using inline style attributes	1 mark

Row 3 left	colspan="3"	1 mark
	height:10%	1 mark

Row 4 cells	width:25%	1 mark
	height:20%	1 mark

```
</td>
<td style="width:25%;">
  <h1>Contact us to help</h1>
</td>
</tr>
```

Row 5	height:10%	1 mark
-------	------------	--------

```
<tr>
  <td colspan="4" style="height:10%">
    <h2>'Save our oceans' works alongside other marine conservation
groups to preserve our oceans. We help to protect and preserve the
ecosystems in our oceans and seas through planned management in order to
prevent the exploitation of these resources. You can assist us in many
ways. Start by selecting the 'contact us' link above.
</h2>
  </td>
</tr>

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

Save our oceans

Above: Spinner dolphins in the Indian Ocean outside North Male Atoll in the Maldives.

Right: Whale shark in Huvadhoo Atoll in the Maldives.

Web page updated by: A Candidate, ZZ999, 9999

**Species | Ocean waste | Contact us to help**

'Save our oceans' works alongside other marine conservation groups to preserve our oceans. We help to protect and preserve the ecosystem in our oceans and seas through planned management in order to prevent the exploitation of these resources.

Browser view	In browser with no letters vis	1 mark
	Address bar is visible	1 mark
Table	No borders/gridlines visible	1 mark
Top row	m21banner.jpg visible	1 mark
Row 2 left	Video seen	1 mark
Row 2 right	whale shark image placed in right column...	1 mark
	... rotated through 90° clockwise	1 mark
	... horizontal reflection	1 mark
	... with all whale shark visible after crop	1 mark
Images	Aspect ratio of both images maintained	1 mark
Row 3	Text placed from source file	1 mark
	Displayed as 2 paragraphs	1 mark
	<b>Web page updated by:</b> A Cand ZZ999 9999	1 mark
	... as a new paragraph	1 mark
	In style p	1 mark
Row 4	<b>Species   Ocean waste   Contact us to help</b>	1 mark
	In h1	1 mark
Row 5	Text from source file in h2	1 mark

# Save our oceans

		Regional Income						
		North America	South America	Europe	Africa	Asia	Oceania	Total
Quarter 1	January	\$3,846.68	\$9,929.78	\$18,445.73	\$214.60	\$2,155.12	\$11,617.92	\$46,209.83
	February	\$10,535.28	\$4,157.40	\$10,134.95	\$49.28	\$4,750.12	\$1,481.32	\$31,108.34
	March	\$21,539.28	\$11,477.23	\$19,250.03	\$166.17	\$3,643.92	\$11,041.55	\$67,118.17
	<b>Total</b>	<b>\$35,921.24</b>	<b>\$25,564.42</b>	<b>\$47,830.70</b>	<b>\$430.05</b>	<b>\$10,549.15</b>	<b>\$24,140.78</b>	<b>\$144,436.34</b>
Quarter 2	April	\$23,975.72	\$7,846.40	\$5,769.50	\$8.99	\$4,570.40	\$5,681.29	\$47,852.30
	May	\$17,729.48	\$2,439.98	\$5,172.10	\$264.19	\$5,759.48	\$11,126.84	\$42,492.08
	June	\$36,775.24	\$1,305.30	\$18,248.70	\$265.61	\$937.24	\$6,443.77	\$63,975.86
	<b>Total</b>	<b>\$78,480.44</b>	<b>\$11,591.69</b>	<b>\$29,190.30</b>	<b>\$538.79</b>	<b>\$11,267.11</b>	<b>\$23,251.91</b>	<b>\$154,320.24</b>
Quarter 3	July	\$19,715.28	\$2,190.40	\$15,568.48	\$146.08	\$1,119.50	\$4,412.56	\$43,152.29
	August	\$26,858.00	\$8,091.83	\$3,264.95	\$106.96	\$5,180.03	\$4,041.08	\$47,542.85
	September	\$34,610.60	\$10,868.33	\$14,827.63	\$197.80	\$5,094.20	\$7,681.46	\$73,280.02
	<b>Total</b>	<b>\$81,183.88</b>	<b>\$21,150.55</b>	<b>\$33,661.05</b>	<b>\$450.84</b>	<b>\$11,393.73</b>	<b>\$16,135.10</b>	<b>\$163,975.16</b>
Quarter 4	October	\$1,181.68	\$5,791.19	\$11,144.48	\$14.77		\$8,033.80	\$30,223.37
	November	\$10,887.32	\$5,971.36	\$4,178.03				
	December	\$39,236.44	\$2,319.91	\$11,141.73				
	<b>Total</b>	<b>\$51,305.44</b>	<b>\$14,082.46</b>	<b>\$26,464.23</b>				
<b>Annual Total</b>		<b>\$246,891.00</b>	<b>\$72,389.11</b>	<b>\$137,146.28</b>				
<b>Quarterly Average</b>		<b>\$61,722.75</b>	<b>\$18,097.28</b>	<b>\$34,286.57</b>				

Footer **Last edited by** space Name & numbers 1 mark  
Centre aligned 1 mark

Rows 2 & 3  
Row 1  
Row 2 & A4:A19  
Col A, R 2,7,11,15,19  
Column A  
Column B  
Rows 21, 22  
Formatting  
Values

Rows deleted, 2020 balance sheet & income  
48 point centred  
Black sans-serif font  
Yellow background  
18 point black sans-serif font  
Grey background  
Merged centre aligned  
Vertically aligned middle  
Right aligned  
Col A and B merged & bold  
Cell borders visible  
\$ with 2dp for currency values  
Single page no row and column headings, fully visible

1 mark  
1 mark  
1 mark  
1 mark  
1 mark  
1 mark  
1 mark  
1 mark  
1 mark  
1 mark  
1 mark

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	A	B	C	D	E
1	Save our				
2					
3			North America	South America	Europe
4	<b>Quarter 1</b>	January	3846.68	9929.784	18445.725
5		February	10535.28	4157.4	10134.95
6		March	21539.28	11477.232	19250.025
7		<b>Total</b>	=SUM(C4:C6)	=SUM(D4:D6)	=SUM(E4:E6)
8	<b>Quarter 2</b>	April	23975.72	7846.404	5769.5
9		May	17729.48	2439.984	5172.1
10		June	36775.24	1305.3	18248.7
11		<b>Total</b>	=SUM(C8:C10)	=SUM(D8:D10)	=SUM(E8:E10)
12	<b>Quarter 3</b>	July	19715.28	2190.396	15568.475
13		August	26858	8091.828	3264.95
14		September	34610.6	10868.328	14827.625
15		<b>Total</b>	=SUM(C12:C14)	=SUM(D12:D14)	=SUM(E12:E14)
16	<b>Quarter 4</b>	October	1181.68	5791.188	11144.475
17		November	10887.32	5971.356	4178.025
18		December	39236.44	2319.912	11141.725
19		<b>Total</b>	=SUM(C16:C18)	=SUM(D16:D18)	=SUM(E16:E18)
20					
21	<b>Annual Total</b>		=C7+C11+C15+C19	=D7+D11+D15+D19	=E7+E11+E15+E19
22	<b>Quarterly Average</b>		=AVERAGE(C7,C11,C15,C19)	=AVERAGE(D7,D11,D15,D19)	=AVERAGE(E7,E11,E15,E19)

C21	=C7+C11+C15+C19	1 mark
	Appropriate formula to calculate annual total for each region	1 mark
C22	=AVERAGE( ... )	1 mark
	... C7,C11,C15,C19	1 mark
	Appropriate function to calculate quarterly average for each region	1 mark
	Row & column heads displayed, landscape & fully visible	1 mark

C7	=SUM(C4:C6)	1 mark
	Appropriate function to total each quarter for each region	1 mark
I4	=SUM(C4:H4)	1 mark
	Appropriate function to total each month and quarter	1 mark



	F	G	H	I
1	oceans			
2	<b>Regional Income</b>			
3	<b>Africa</b>	<b>Asia</b>	<b>Oceania</b>	<b>Total</b>
4	214.6008	2155.116	11617.92	=SUM(C4:H4)
5	49.281	4750.116	1481.316	=SUM(C5:H5)
6	166.1685	3643.92	11041.548	=SUM(C6:H6)
7	=SUM(F4:F6)	=SUM(G4:G6)	=SUM(H4:H6)	=SUM(C7:H7)
8	8.985	4570.398	5681.292	=SUM(C8:H8)
9	264.1908	5759.478	11126.844	=SUM(C9:H9)
10	265.6116	937.236	6443.772	=SUM(C10:H10)
11	=SUM(F8:F10)	=SUM(G8:G10)	=SUM(H8:H10)	=SUM(C11:H11)
12	146.0838	1119.498	4412.556	=SUM(C12:H12)
13	106.9596	5180.028	4041.084	=SUM(C13:H13)
14	197.7972	5094.204	7681.464	=SUM(C14:H14)
15	=SUM(F12:F14)	=SUM(G12:G14)	=SUM(H12:H14)	=SUM(C15:H15)
16	14.7744	4057.458	8033.796	=SUM(C16:H16)
17	227.9556	3082.908	6702.18	=SUM(C17:H17)
18	77.2575	4644.15	2028.288	=SUM(C18:H18)
19	=SUM(F16:F18)	=SUM(G16:G18)	=SUM(H16:H18)	=SUM(C19:H19)
20				
21	=F7+F11+F15+F19	=G7+G11+G15+G19	=H7+H11+H15+H19	=I7+I11+I15+I19
22	=AVERAGE(F7,F11,F15,F19)	=AVERAGE(G7,G11,G15,G19)	=AVERAGE(H7,H11,H15,H19)	=AVERAGE(I7,I11,I15,I19)

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