Cambridge International AS & A Level

INFORMATION TECHNOLOGY

Paper 4 Advanced Practical MARK SCHEME Maximum Mark: 110 9626/04 May/June 2020

Published

Students did not sit exam papers in the June 2020 series due to the Covid-19 global pandemic.

This mark scheme is published to support teachers and students and should be read together with the question paper. It shows the requirements of the exam. The answer column of the mark scheme shows the proposed basis on which Examiners would award marks for this exam. Where appropriate, this column also provides the most likely acceptable alternative responses expected from students. Examiners usually review the mark scheme after they have seen student responses and update the mark scheme if appropriate. In the June series, Examiners were unable to consider the acceptability of alternative responses, as there were no student responses to consider.

Mark schemes should usually be read together with the Principal Examiner Report for Teachers. However, because students did not sit exam papers, there is no Principal Examiner Report for Teachers for the June 2020 series.

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

Cambridge International is publishing the mark schemes for the June 2020 series for most Cambridge IGCSE[™] and Cambridge International A & AS Level components, and some Cambridge O Level components.

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.

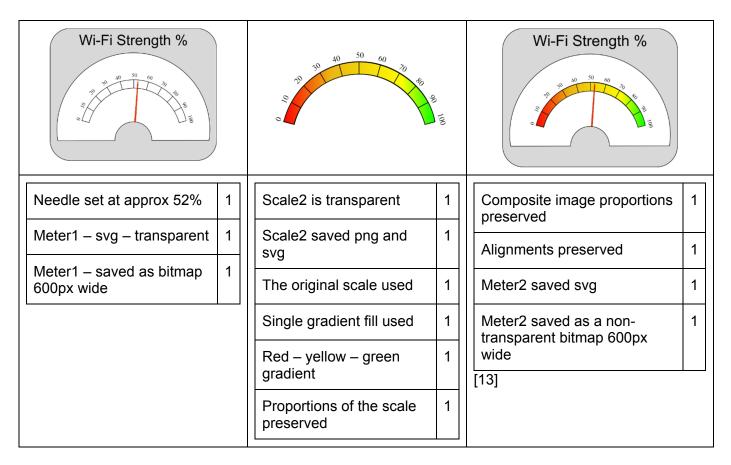
GENERIC MARKING PRINCIPLE 5:

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.

Task 1									
Wi-Fi Strength %			2						
Surround is transparent	1		Scale is transparent	1		Needle is transparent	1		
Surround saved png and svg	1		Scale saved png and svg	1		Needle saved png and svg	1		
Rounded corners correct	1		Correct arc	1		Needle Tapers	1		
Small Semi-circle drawn	1		Correct Width	1		Correct tip shape	1		
Centre aligned	1		10 divisions created	1		needle is Red	1		
Shapes Combined	1		Divisions are equally spaced	1		Needle has Hairline outline	1		
Correct Proportions	1		Divisions are Centre	1		[30]			
Large Semi-circle drawn	1		aligned						
Correct Proportions	1		Numbers are displayed	1					
Centre aligned	1		Numbers are aligned	1					
Text accurate	1		with divisions						
Sans-serif Font correct	1		Numbers are angled with divisions	1					
Text proportions correct	1		Correct Proportions	1					



Wi-Fi Strength %		Wi-Fi Strength %
The Meter fills the frame	1	The needle takes 1 second to return
Needle rotates from centre of the semi-circle	1	The needle returns to 65%
The needle rotates smoothly	1	
The sweep is Consistent	1	
The 1 st sweep takes 2 seconds	1	
The needle reaches 97% max	1	
Wi-Fi Strength %		Wi-Fi Strength %
The needle swings as required	1	The needle returns to 0%
The needle swings between 65-75%	1	The needle takes 1 second to return
The swing is repeated	1	There is a 2 second pause
The swings take 1 second	1	The animation Restarts
		The animation is saved as gif or swf

Task 3

806 Female Ruby 823 Female Sophia 515 Male Charles 261 Female Abbie RPCMembers + RPCLetters.docx		0	I J day Age(July2020) Mo 7/1984 36 6/1984 36 =DATEDIF(I5,"31/07/2020","	k onth n "Y")	J Age(July2020) 36 36 35 35 35 4 U Month of Birthday July June October Sentember	K Month num Email Dor dodgit.cor pookmail. dodgit.cor trashymai	7 J 6 J 10 (9 S main m com m
Worksheet named RPCMembers	1		Age Field added	1	Years recorded	ł	1
Workbook Named RPCMembers	1		Datedif or valid method	1	Month (Numeri added	c) field	1
Workbook saved as 1			Based on 31/07/2020	1	Month (Text) fie	eld added	1
MergeData					Email Domain	extracted	1
					Domain only		1
					[11]		

Member No: { MERGEFIELD Member_Number }
{ MERGEFIELD GivenName } { MERGEFIELD Surname }
{ MERGEFIELD StreetAddress }
{ MERGEFIELD TownCity }
{ MERGEFIELD ZipCode }
<pre>{ SKIPIF { MERGEFIELD Month_number } < 6 }{ SKIPIF { MERGEFIELD AgeJuly2020 } < 40 }</pre>
{ DATE \@ "dd MMMM yyyy" * MERGEFORMAT }
Dear { MERGEFIELD GivenName }
{ IF { MERGEFIELD Email_Domain } = "pookmail.com" "As you know, you are required to register a
working email address. Unfortunately, it seems your email provider { MERGEFIELD Email_Domain } is no longer operational.
Please acknowledge this letter with your new email address.
" "{ IF { MERGEFIELD Email_Domain } = "dodgit.com" "As you know, you are required to register a
working email address. Unfortunately, it seems your email provider { MERGEFIELD Email_Domain } is no longer operational.
Please acknowledge this letter with your new email address." "" }" }
Our records show that you will turn 40 years of age in { MERGEFIELD Month_of_Birthday } of this year.

Member No	1
GivenName Surname and space	1
All Address fields 1 per line	1
Date field in dd MMMM yyyy format	1
Salutation Givenname	1
Space	1
Month of Birthday text	1
Conditional field for pookmail	1
Nested Email Domain	1
Correct text	1
Nested Dodgit conditional field	1
Nested Email Domain	1
Correct text	1

	RPCLetters file	1
	Correct 6 recipients	1
	Correct 2 no added text	1
	Correct 4 with added text	1
	Consistent format	1
	Proofed and ffp	1
[1	9]	

Cambridge International AS & A Level – Maww&chyamamicpapters/.tcom2020 PUBLISHED

			1					
Task 4 Programming for the we JavaScript	eb	Task 4 Programming for the we JavaScript	eb	Task 4 Programming for the JavaScript	Task 4 Programming for the web JavaScript			
Upload progress simulation Click the botton to start the display	ion U	Jpload progress simulating Click the button to start the display Upload	ion	Upload progress simula Click the buttoe to start the display Upload	ition	Upload progress simulation Click the botton to start the display Upload		
		38%		63%		100%		
Page Styles preserved	1 E	Bar 1 loads	1	Bar 4loads	1	Bar 7 loads		
Page positions	1 E	Bar 2 loads	1	Bar 5 loads	1	Bar 8 loads		
preserved Button click		3ar 3 loads	1	Bar 6 loads	1	Percentages match		
produces result (any)						Percentages rounded		
						Sequence terminates		
return;	se); //This w	rill stop the Interval tim	mer callin	ng the Timer function when	the count	variable==9		
		s) should be inserted he ement will select the blo		sponding to the number of '	the count v	variable		
<pre> { case 0: document.getElementById("display").src='Bar0.png';//These blocks will display .src images in the html with element id="dis document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break; </pre>								
-	ById("percent).innerning_Mach.iounu(count*12.		n the html	with element id="display"		
<pre>case 1: document.getElementM document.getElementM case 2:</pre>	ById("display ById("percent	").src='Barl.png';//These ").innerHTML=Math.round(e blocks v count*12.9	5)+"%"; break; will display .src images in 5)+"%"; break;	n the html	with element id="display"		
<pre>case 1: document.getElementi document.getElementi case 2: document.getElementi document.getElementi case 3: document.getElementi</pre>	ById("display ById("percent ById("display ById("percent ById("display	<pre>'').src='Barl.png';//These '').innerHTML=Math.round(' '').src='Bar2.png';//These '').innerHTML=Math.round(' '').src='Bar3.png';//These</pre>	e blocks w count*12.5 e blocks w count*12.5 e blocks w	<pre>5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i;</pre>	h the html	with element id="display" with element id="display"		
<pre>case 1: document.getElementi document.getElementi case 2: document.getElementi document.getElementi document.getElementi case 4: document.getElementi document.getElementi document.getElementi document.getElementi</pre>	ById ("display ById ("percent ById ("display ById ("percent ById ("display ById ("percent ById ("display	<pre>").src='Barl.png';//Thes ").innerHTML=Math.round(").src='Bar2.png';//Thes ").innerHTML=Math.round(").src='Bar3.png';//Thes ").innerHTML=Math.round(</pre>	e blocks t count*12. e blocks t count*12. e blocks t count*12.	<pre>5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break;</pre>	h the html	with element id="display" with element id="display"		
<pre>case 1: document.getElement! document.getElement! case 2: document.getElement! document.getElement! document.getElement! document.getElement! document.getElement! break; case 5: document.getElement!</pre>	ById ("display ById ("percent ById ("percent ById ("display ById ("display ById ("percent ById ("display ById ("display	<pre>/").src='Barl.png';//Thes. /").innerHTML=Math.round(/").src='Bar2.png';//Thes. /").innerHTML=Math.round(/").src='Bar3.png';//Thes. /").innerHTML=Math.round(/").src='Bar4.png'; /").innerHTML=Math.round()</pre>	e blocks t count*12.; e blocks t count*12.; e blocks t count*12.; count*12.;	<pre>5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break;</pre>	h the html	with element id="display" with element id="display"		
<pre>case 1: document.getElementi document.getElementi case 2: document.getElementi case 3: document.getElementi case 4: document.getElementi break; case 5: document.getElementi document.getElementi document.getElementi document.getElementi case 6: document.getElementi case 6:</pre>	ById ("display ById ("percent ById ("percent ById ("display ById ("display ById ("display ById ("display ById ("display ById ("percent ById ("display	<pre>/").src='Barl.png';//Thes ").innerHTML=Math.round(").src='Bar2.png';//Thes ").innerHTML=Math.round(/").src='Bar3.png';//Thes ").innerHTML=Math.round(").src='Bar4.png'; ").innerHTML=Math.round(").src='Bar5.png'; ").innerHTML=Math.round(</pre>	e blocks t count*12. e blocks t count*12. e blocks t count*12. count*12.	<pre>5)+"%";break; will display .src images i: 5)+"%";break; will display .src images i: 5)+"%";break; will display .src images i: 5)+"%";break; 5)+"%";break;</pre>	h the html	with element id="display" with element id="display"		
<pre>case 1: document.getElementi document.getElementi case 2: document.getElementi case 3: document.getElementi document.getElementi document.getElementi document.getElementi document.getElementi document.getElementi document.getElementi case 6: document.getElementi document.getElementi case 7: document.getElementi docume</pre>	ById ("display ById ("percent ById ("percent ById ("percent ById ("display ById ("display ById ("display ById ("display ById ("display ById ("display ById ("display ById ("percent	<pre>/").src='Barl.png';//These ").innerHTML=Math.round(/").src='Bar2.png';//These ").innerHTML=Math.round(/").src='Bar3.png';//These ").innerHTML=Math.round(/").src='Bar4.png'; ").innerHTML=Math.round(/").src='Bar5.png'; ").innerHTML=Math.round(/").src='Bar6.png'; ").innerHTML=Math.round(/").src='Bar7.png'; ").innerHTML=Math.round(/").src='Bar7.png'; ").innerHTML=Math.round()</pre>	e blocks u count*12.! e blocks u count*12.! e blocks u count*12.! count*12.! count*12.!	<pre>5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break; 5)+"%";break; 5)+"%";break;</pre>	h the html	with element id="display" with element id="display"		
<pre>case 1: document.getElementi document.getElementi case 2: document.getElementi case 3: document.getElementi document.getElementi document.getElementi document.getElementi document.getElementi document.getElementi case 6: document.getElementi document.getElementi case 7: document.getElementi case 8: document.getElementi document.getElementi case 8: document.getElementi document.getElementi case 8: document.getElementi case 8: document.getElementi case 8: document.getElementi case 8: document.getElementi</pre>	ById ("display ById ("percent ById ("percent ById ("display ById ("display ById ("display ById ("display ById ("display ById ("display ById ("display ById ("display ById ("display ById ("percent ById ("display ById ("percent tion Timer()	<pre>/").src='Barl.png';//Thes ").innerHTML=Math.round(").src='Bar2.png';//Thes ").innerHTML=Math.round((").src='Bar3.png';//Thes ").innerHTML=Math.round((").src='Bar4.png'; ").innerHTML=Math.round((").src='Bar5.png'; ").innerHTML=Math.round((").src='Bar6.png'; ").innerHTML=Math.round((").src='Bar7.png'; ").innerHTML=Math.round((").src='Bar8.png'; ").innerHTML=Count*12.5+</pre>	e blocks v count*12. e blocks v count*12. e blocks v count*12. count*12. count*12. count*12.	<pre>5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break; will display .src images i; 5)+"%";break; 5)+"%";break; 5)+"%";break;</pre>	h the html	with element id="display" with element id="display"		

Cambridge International AS & A Level – Markv&chymamicpapters/.tcom2020 PUBLISHED

<script> </script> tags preserved in place					
Conditional loop attempted					
Conditional loop valid	1				
Switch statement used.					
Correct // comment syntax	1				
Appropriate comments	1				

[20]