



Cambridge International AS & A Level

INFORMATION TECHNOLOGY

9626/04

Paper 4 Advanced Practical

May/June 2020

MARK SCHEME

Maximum Mark: 110

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.

This document consists of **10** 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.

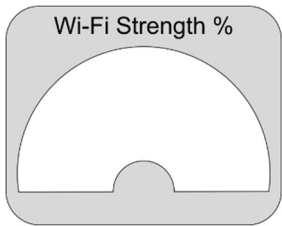
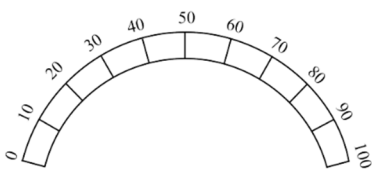
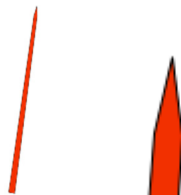
GENERIC MARKING PRINCIPLE 5:

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:

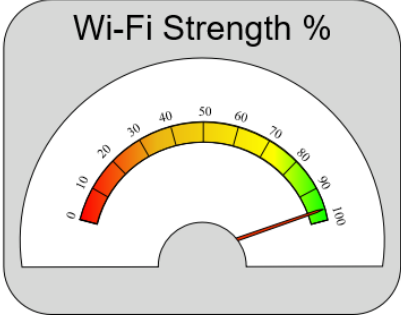
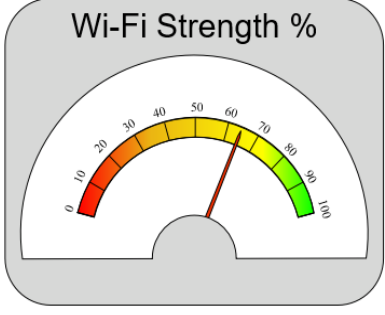
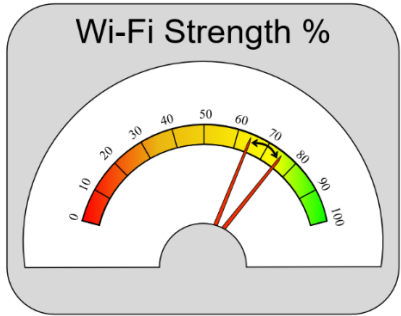
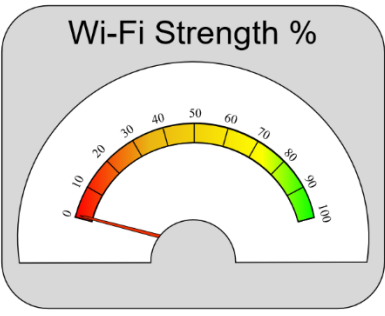
Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Task 1

					
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 aligned	1	[30]	
Large Semi-circle drawn	1	Numbers are displayed	1		
Correct Proportions	1	Numbers are aligned with divisions	1		
Centre aligned	1	Numbers are angled with divisions	1		
Text accurate	1	Correct Proportions	1		
Sans-serif Font correct	1				
Text proportions correct	1				

Needle set at approx 52%	1	Scale2 is transparent	1	Composite image proportions preserved	1
Meter1 – svg – transparent	1	Scale2 saved png and svg	1	Alignments preserved	1
Meter1 – saved as bitmap 600px wide	1	The original scale used	1	Meter2 saved svg	1
		Single gradient fill used	1	Meter2 saved as a non-transparent bitmap 600px wide	1
		Red – yellow – green gradient	1	[13]	
		Proportions of the scale preserved	1		

Task 2

																					
<table border="1"> <tr> <td>The Meter fills the frame</td><td>1</td></tr> <tr> <td>Needle rotates from centre of the semi-circle</td><td>1</td></tr> <tr> <td>The needle rotates smoothly</td><td>1</td></tr> <tr> <td>The sweep is Consistent</td><td>1</td></tr> <tr> <td>The 1st sweep takes 2 seconds</td><td>1</td></tr> <tr> <td>The needle reaches 97% max</td><td>1</td></tr> </table>	The Meter fills the frame	1	Needle rotates from centre of the semi-circle	1	The needle rotates smoothly	1	The sweep is Consistent	1	The 1 st sweep takes 2 seconds	1	The needle reaches 97% max	1	<table border="1"> <tr> <td>The needle takes 1 second to return</td><td>1</td></tr> <tr> <td>The needle returns to 65%</td><td>1</td></tr> </table>	The needle takes 1 second to return	1	The needle returns to 65%	1				
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<table border="1"> <tr> <td>The needle swings as required</td><td>1</td></tr> <tr> <td>The needle swings between 65-75%</td><td>1</td></tr> <tr> <td>The swing is repeated</td><td>1</td></tr> <tr> <td>The swings take 1 second</td><td>1</td></tr> </table>	The needle swings as required	1	The needle swings between 65-75%	1	The swing is repeated	1	The swings take 1 second	1	<table border="1"> <tr> <td>The needle returns to 0%</td><td>1</td></tr> <tr> <td>The needle takes 1 second to return</td><td>1</td></tr> <tr> <td>There is a 2 second pause</td><td>1</td></tr> <tr> <td>The animation Restarts</td><td>1</td></tr> <tr> <td>The animation is saved as gif or swf</td><td>1</td></tr> <tr> <td>[17]</td><td></td></tr> </table>	The needle returns to 0%	1	The needle takes 1 second to return	1	There is a 2 second pause	1	The animation Restarts	1	The animation is saved as gif or swf	1	[17]	
The needle swings as required	1																				
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The animation Restarts	1																				
The animation is saved as gif or swf	1																				
[17]																					

Task 3

806 Female Ruby 823 Female Sophia 515 Male Charles 261 Female Abbie RPCMembers RPCLetters.docx ☒ RPCMembers.xlsx ☒ MergeData.xlsx	I J K nday Age(July2020) Month n '07/1984 36 '06/1984 36 =DATEDIF(I5,"31/07/2020","Y")	J K Age(July2020) Month number 36 7 36 6 35 10 35 9 L M Month of Birthday Email Domain 7 July dodgit.com 3 June pookmail.com 0 October dodgit.com 4 September trashmail.com
Worksheet named RPCMembers 1 Workbook Named RPCMembers 1 Workbook saved as MergeData 1	Age Field added 1 Datedif or valid method 1 Based on 31/07/2020 1	Years recorded 1 Month (Numeric) field added 1 Month (Text) field added 1 Email Domain extracted 1 Domain only 1 [11]

Member No: { MERGEFIELD Member_Number }

{ MERGEFIELD GivenName } { MERGEFIELD Surname }

{ MERGEFIELD StreetAddress }

{ MERGEFIELD TownCity }

{ MERGEFIELD ZipCode }

{ SKIPIF { MERGEFIELD Month_number } < 6 } { SKIPIF { MERGEFIELD AgeJuly2020 } < 40 }

{ 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	RPCLetters file	1
GivenName Surname and space	1	Correct 6 recipients	1
All Address fields 1 per line	1	Correct 2 no added text	1
Date field in dd MMMM yyyy format	1	Correct 4 with added text	1
Salutation Givenname	1	Consistent format	1
Space	1	Proofed and ffp	1
Month of Birthday text	1	[19]	
Conditional field for pookmail	1		
Nested Email Domain	1		
Correct text	1		
Nested Dodgit conditional field	1		
Nested Email Domain	1		
Correct text	1		

Task 4

Task 4 Programming for the web JavaScript Upload progress simulation Click the button to start the display Upload 		Task 4 Programming for the web JavaScript Upload progress simulation Click the button to start the display Upload  38%		Task 4 Programming for the web JavaScript Upload progress simulation Click the button to start the display Upload  63%		Task 4 Programming for the web JavaScript Upload progress simulation Click the button to start the display Upload  100%	
Page Styles preserved	1	Bar 1 loads	1	Bar 4 loads	1	Bar 7 loads	1
Page positions preserved	1	Bar 2 loads	1	Bar 5 loads	1	Bar 8 loads	1
Button click produces result (any)	1	Bar 3 loads	1	Bar 6 loads	1	Percentages match	1
						Percentages rounded	1
						Sequence terminates	1

```

</style>
<script>
function Countdown()
{
  var count=-1;
  var pause=setInterval(Timer, 500); //This will call the Timer function every 1 second

  function Timer()// The timer function code is completed by adding conditional statements to display the images
  {
    count=count+1;
    if (count >8)
    {
      clearInterval(pause); //This will stop the Interval timer calling the Timer function when the count variable==9
      return;
    }
    //The conditional statement(s) should be inserted here
    switch (count) //The switch statement will select the block corresponding to the number of the count variable
    {
      case 0:
        document.getElementById("display").src='Bar0.png';//These blocks will display .src images in the html with element id="display"
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      case 1:
        document.getElementById("display").src='Bar1.png';//These blocks will display .src images in the html with element id="display"
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      case 2:
        document.getElementById("display").src='Bar2.png';//These blocks will display .src images in the html with element id="display"
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      case 3:
        document.getElementById("display").src='Bar3.png';//These blocks will display .src images in the html with element id="display"
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      case 4:
        document.getElementById("display").src='Bar4.png';
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      break;
      case 5:
        document.getElementById("display").src='Bar5.png';
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      case 6:
        document.getElementById("display").src='Bar6.png';
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      case 7:
        document.getElementById("display").src='Bar7.png';
        document.getElementById("percent").innerHTML=Math.round(count*12.5)+"%";break;
      case 8:
        document.getElementById("display").src='Bar8.png';
        document.getElementById("percent").innerHTML=count*12.5+"%";
    }
  } //Closure of function Timer()
} //Closure of function Countdown()
</script>
</head>

```

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

[20]