



Mark Scheme

Additional Sample Assessment Materials

Pearson Edexcel International Advanced
Subsidiary/Advanced Level in Information
Technology

Unit 2 (WIT12)

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Unit 2 Additional Sample Material Mark Scheme

Question number	Answer	Additional guidance	Mark
1 (a)	<p>Award one mark for each descriptive point, up to a maximum of two marks.</p> <ul style="list-style-type: none"> • The video will be contained in an inline frame (1) • Sets the width and height of the video / Size 420 by 345 (1) • The video is embedded in the web page (1) • Is set to automatically play when the web page is opened (1) 		2

Question number	Answer	Additional guidance	Mark
1 (b)	<p>Award one mark for each correction up to a maximum of two marks.</p> <ul style="list-style-type: none"> • Change "center" to "left" – Line 15 (text-align: left;) • Change closing tag <td>Bing<td> to <td>Bing</td> - Line 45 	Line numbers may be different.	2

Question number	Answer	Additional guidance	Mark
1 (c)	<p>Complete link is:</p> <pre>Google</pre> <p>Award up to two marks for:</p> <ul style="list-style-type: none"> • <a href=http://www.google.com (1) • target="_blank">Google (1) 	Accept https://	2

Question number	Answer	Additional guidance	Mark
1 (d) (i)	<p>Award one mark for a correct definition of a block-level element.</p> <ul style="list-style-type: none"> • Always starts on a new line (1) • Takes up the full width available (e.g. stretches out to the left and right as far as it can) (1) • Ignores the vertical-align property (1). • By default, a block element will be placed below the previous element (i.e. stacked) (1) 	May give examples such as <code><div></code> for block-level	1
1 (d) (ii)	<p>Award one mark for a correct definition of an inline element.</p> <ul style="list-style-type: none"> • Does not start on a new line (1) • Only takes up as much width as needed. (1) • Is subject to the vertical-align property (1) • Will ignore top and bottom margin settings (1) • Will apply left and right margins and / or any padding (1) • Flows along text content (i.e. lines up one after the other) (1) • If floated left or right, will automatically become a block-level element (1). 	May give examples such as <code></code> for inline.	1
Total for Question 1			8

Question number	Answer	Additional guidance	Mark
2 (a)	<p>Award one mark for each point in a linked explanation.</p> <p>Should target</p> <ul style="list-style-type: none"> Line 23 of HTML (Figure 4) Lines 7 to 14 of CSS (Figure 5) <p>Look for expansions of these ideas:</p> <ul style="list-style-type: none"> image-group used with image-fullsize to enable hover action to take place properties of image-fullsize set in CSS including visibility being hidden image-group hover switches visibility on for image-fullsize <p>Example such as:</p> <ul style="list-style-type: none"> Lines 7 to 12 of the CSS code sets the properties (height, width, floating position and visibility) of the larger image (1). Its initial visibility is hidden (1). The image_group class on line 23 of the HTML code links to the image_group class defined on line 14 of the CSS code (1) The code switches the visibility of image fullsize to be visible when the mouse hovers over the thumbnail image (1) 		4

Question number	Answer	Additional guidance	Mark
2 (b)	<p>Award one mark for positioning the sidebar to the right and one mark for changing the colour of image-two to orange.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <pre><code>.sidebar { float: right; width: 25%; border: 2px solid black; }</code></pre> </div> <p>(1)</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <pre>88 .image-two { 89 background-color: orange; 90 }</pre> </div> <p>(1)</p>	<p>Changes must be made in the CSS</p> <p>.sidebar can use float:left; for the same effect</p> <p>.image-two changes must be made at the end of the file within the responsive breakpoint</p>	2

Question number	Answer	Additional guidance	Mark
2 (c)	<p>Award one mark for each of the errors corrected:</p> <p>The opening bracket for the CSS rule is missing on line 7.</p> <pre>.box {</pre> <p>(1)</p> <p>The size of the hover effect has not been set.</p> <pre>div:animation:hover {</pre> <pre>width:500px;</pre> <p>(1)</p>		2

Question number	Answer	Additional guidance	Mark
2 (d)	<p>Award a maximum of two marks for a description such as:</p> <p>The CSS box model is essentially a box that wraps around every HTML element (1), it consists of margins, borders, padding and the actual content (1).</p>		2
Total for Question 2			10

Question number	Answer	Additional guidance	Mark
3 (a)	<p>Award a maximum of two marks for a description such as:</p> <p>Event handlers allow your web page to detect when an event e.g mouse click / mouse over / form etc. has occurred (1), so that it can run some JavaScript code (1).</p> <p>An event handler is a special attribute which is added to a HTML element (1), when an event occurs the JavaScript is run (1).</p>		2

Question number	Answer	Additional guidance	Mark
3 (b)	<p>Award four marks for the correct completion of the code.</p> <p>Setting it to loop using WHILE (1) Iteration until 10 (1) Using the variable Countdown as part of the loop (1) output variable would produce an output (1)</p> <p>Example</p> <pre> 15 while(CountDown <= 10) { 16 output = output + CountDown + " " 17 CountDown++ 18 }</pre>		4

Question number	Answer	Additional guidance	Mark
3 (c)	<p>Award one marks for each linked correct element up to a maximum of five marks.</p> <p>Return a message if nothing is entered (1) Return a message if text is entered (1) Return a message if the number entered is too low / high (1) Use of variables (1) All validation working correctly with appropriate messages (1)</p> <p>Example</p> <pre> 7 <input type="text"/> 8 9 <script> 10 function checkInput() { 11 var inputNumber= document.getElementById("number").value 12 if ((inputNumber == "") (isNaN(inputNumber))) { 13 alert("You must enter a number") 14 }else if (inputNumber<10){ 15 alert("Number is too low") 16 }else if(inputNumber>50){ 17 alert("Number is too high") 18 } 19 } 20 </script> </pre>		5
3 (d)	<p>Award up to two marks for an explanation such as:</p> <ul style="list-style-type: none"> The catch clause is executed only if an exception is thrown (1), whereas the finally clause is always executed (regardless of whether an exception was thrown or caught) (1) 		2
Total for Question 3			13

Question number	Answer	Additional guidance	Mark	
4	Award one mark for each of the following points up to a maximum of fourteen marks.		20	
	Evidence found in:			
	HTML – Head	<html lang="en">		1
	HTML - Head	Link is present to external style sheet		1
	HTML – Body	Header includes banner.jpeg Do not award mark if the image is blurred/skewed		1
	HTML – Body	Alt tags used on at least one image with suitable description		1
	HTML - Body	At least one HTML5 semantic element used to define part of the page: <header> <nav> <section> <article> <footer>		1
	HTML - Body	Columns / table used to maintain page layout		1
	HTML - Body	A functioning hyperlink from the navigation bar or hotspot to the Contact Us page		1
	HTML - Body	The advert is used with all four images.		1
	HTML -Body	Footer includes the text 'Copyright Happy Pet 2018'		1
	HTML -Body	Footer is right-aligned		1
	HTML – Body / CSS	Horizontal lines used		1
	HTML – Body / CSS	Emphasis (Strong / Important) set on at least one heading		1
	HTML – Body / CSS	At least one colour set correctly Font – SlateGray, (RGB(112, 128, 144) Article Headings - Black, (RGB(0, 0, 0) Footer <ul style="list-style-type: none">• Background Black with a lightness of 70%, RGB(179, 179, 179)• White text, RGB(255, 255, 255)		1
CSS	All page components are floated centre	1		

Award up to a maximum of **six** marks for the adherence to the component layout and the application of CSS using the levels based mark scheme below.

Topic area	0	1	2	3	Mark
Adherence to component layout design	No awardable content	There is little adherence to the component layout design, leading to a solution that is not fit for purpose or is not suitable for the intended audience.	An attempt to adhere to the component layout design leads to a solution that is, in parts, fit for purpose and is, in parts, suitable for the intended audience.	The webpage fully adheres to the component layout design and style requirements. The resulting solution is fit for purpose and is suitable for the intended audience.	3
Application of CSS to control presentation		There is little attempt to make use of the facilities of CSS to control appearance and style. Most components rely on default configuration.	An attempt has been made to use CSS to control the appearance and style of some components. This has been successful in some cases.	Consistent and accurate application of CSS is used throughout to control the appearance and style of all components.	3
Total for Question 4					20

Question number	Answer			Mark
5	Award one mark for each of the following points up to a maximum of 11 marks.			20
	Page		Mark	
	FAQ.html	Pop up is shown when page loads	1	
		Welcome message shown when text clicked.	1	
		Answers to the questions are hidden when page is opened.	1	
		Answers to the questions are shown when the text is clicked.	1	
		Div tags have unique ID's assigned to them	1	
		GetElementbyID method is used to trigger the event	1	
		Q3 toggles (is shown and hidden) when clicked	1	
	Index.html	Use the year constant in the age calculation	1	
		Display error message if day / month is out of range.	1	
		Output the users date of birth as month name, day, year.	1	
		Display a warning if the user is not 18 years old.	1	

Award up to a maximum of **nine** marks for the functionality, user interface design, use of notation, using the levels based mark scheme below.

Topic area	0	1	2	3	Mark
<p>Appropriate functionality:</p> <ul style="list-style-type: none"> components and code have been decomposed into appropriate parts dynamic behaviours are implemented in JavaScript. 		<p>The component parts of the program are incorrect or incomplete, providing a program of limited functionality that meets some of the given requirements.</p> <p>Mostly inappropriate logic used.</p>	<p>The component parts of the program are complete, providing a functional program that meets some of the given requirements.</p> <p>Some parts of the logic are clear and mostly appropriate to the problem.</p>	<p>The component parts of the program are complete, providing a functional program that fully meets the given requirements.</p> <p>The logic is clear and appropriate to the problem.</p>	3
<p>Appropriate interface design:</p> <ul style="list-style-type: none"> error messages and other status reports Interactivity between JavaScript and HTML 		<p>The design of the user interface lacks consideration for fitness for purpose and the intended audience.</p>	<p>The design of the user interface is in parts fit for purpose and addresses some of the needs of the intended audience.</p>	<p>The design of the user interface is fully fit for purpose and suitable for the intended audience.</p>	3

Topic area	0	1	2	3	Mark
<p>Appropriate use of notation:</p> <ul style="list-style-type: none"> Presentation of JavaScript ensures clear readability comments provide clarity. 		<p>Uses programming constructs and techniques to produce some required outcomes in the code.</p> <p>Uses data types that are rarely appropriate to the problem.</p> <p>Limited use of accurate syntax.</p> <p>Limited appropriate use and manipulation of data structures.</p> <p>Some use of meaningful variable names with limited or unhelpful commenting.</p> <p>Parts of the code are clear and readable but much of it makes limited use of appropriate spacing and indentation.</p>	<p>Uses programming constructs and techniques to produce most of required outcomes in the code.</p> <p>Uses data types, some of which are appropriate to the problem.</p> <p>Uses mostly accurate syntax.</p> <p>Accesses and manipulates data structures to produce mostly correct results and/or outcomes.</p> <p>Uses mostly meaningful variable names, with some use of appropriate commenting.</p> <p>Code is mostly clear and readable, making some use of appropriate spacing and indentation.</p>	<p>Accurate programming constructs and techniques are used.</p> <p>Appropriate data types are selected.</p> <p>Accurate syntax is used.</p> <p>Data structures are accessed and manipulated efficiently.</p> <p>Meaningful variable names and comments are used throughout.</p> <p>Code is clear and readable, making effective use of appropriate spacing and indentation.</p>	3
Total for Question 5					20

Question number	Answer	Mark
6	<p>Indicative content:</p> <ul style="list-style-type: none"> • The website has a specific purpose which is clear to see. • Users want information quickly - The web page uses short sentences and provides links to other pages. • Sans-Serif fonts such as Arial and Verdana are easier to read online – the web page uses a san-serif font. • The page uses a clear font size for reading easily online. • The typeface is consistent. • Complementary colours have been used to create balance. • The web page also uses contrasting colours for the text and background to make it easier to read especially for visually impaired users. • White space has been used well to create an uncluttered modern look. • The images are clear and relevant to the web page. • Navigation is clear. • A site link to a site map has been provided to allow quick access. • The hyperlinks have been styled to remove the 'underline'. • A grid-based layout has been used to arrange to content into sections to create a balanced look. • Visual flow has been addressed by displaying information in order of importance (left to right, and top to bottom). • Reasonable sized images have been used to reduce load time however separate CSS / JavaScript files could have been used to reduce load time further. • The web page is not mobile friendly. • Images have alt tags attached. • Description and key word meta tags have been used to allow the web page to be indexed by a search engine. • Semantic markup has been used throughout to give meaning to the content and allow it to be used by assistive technologies. • Key words and description used in article text 	9

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1 – 3	<ul style="list-style-type: none"> • Applies understanding with limited coherence, showing limited understanding of the given issue. • Assessment of solution is superficial or unbalanced, and judgements lack support from evidence.
Level 2	4 – 6	<ul style="list-style-type: none"> • Applies understanding to make some coherent connections, showing some understanding of the given issue. • Assessment of solution is partially developed, but this may be unbalanced, using evidence to support some judgements.
Level 3	7 - 9	<ul style="list-style-type: none"> • Applies understanding coherently, showing a thorough understanding of the given issue. • Assessment of solution is balanced and developed, using evidence to support judgements throughout.

