

Mark Scheme (Results)

June 2014

Pearson Edexcel GCSE ICT (5IT03) Paper 01 Unit 1: Exploring Digital Design

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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.

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (a)	D	•		1

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(b) (i)	<ul> <li>Any THREE from:</li> <li>Graffiti style font for title/heading</li> <li>Use of text speak/slang ('Kool 4 Skool')</li> <li>Competition prize</li> <li>Catchy phrase - 'School Holiday Spectacular'</li> <li>Repetition of 'school'</li> <li>Images that appeal to age group (e.g. shows dinosaurs, children etc)</li> <li>QR code</li> </ul>		Reference to font must clearly refer to the title.  'Use of images' on its own is not enough must refer to content/theme of images	
	3x1			3

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (b)(ii)	Any THREE from:  Change graffiti title/make title easier to read/change title font to one that is easier to read  Change style of images (e.g. cartoon dinosaur)  Use simpler language/less complex vocabulary (e.g. not Spectacular, exclusive etc)  Replace/remove QR code (use web address instead)		For marking point one responses should be specifically about making the title easier to read and not general about fonts.	
	3x1			3

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (c) (i)	A			1

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(c) (ii)	Any <b>one</b> reason from:  • Larger image/file size should give higher quality image  • .tif is usually a better image quality (than .jpg)  • .tif is an uncompressed image (so would have better quality printing)	Do not accept better without explanation.	Just identifying the file type not enough, must give a reason why the file type is suitable.	1

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (d)	<ul> <li>Any two reasons from:         <ul> <li>Might not need to seek copyright permission/licence again</li> <li>Saves time compared to making from scratch/searching for new material</li> <li>Would already have been tested in another product</li> <li>Create consistency of style between products</li> <li>Ensure important information is the same on both leaflets</li> </ul> </li> </ul>		'saves time' must be justified	2

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(e)	<ul> <li>Can ask follow up questions/clarify answers</li> <li>Gets feedback immediately</li> <li>Verbal answers are likely to be more detailed</li> <li>You will get responses for all questions/questions will not be missed out/ignored</li> <li>Interviews are appropriate for the people he is getting feedback from</li> <li>Pick-up on non-verbal responses</li> <li>Can re-word/re-phrase a question to suit the person being interviewed</li> <li>Can control the distribution of materials more easily</li> </ul>			3
	JX1			3

**Total for Question 1 – 14 marks** 

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (a)	<ul> <li>Any three improvements from:</li> <li>Group main navigation items/buttons</li> <li>Remove/disable/change colour of button of screen they are on</li> <li>Replace text on buttons with images</li> <li>Make animal hyperlinks more obvious (e.g. underline to show hyperlink)</li> <li>Improve layout for list of areas. (e.g. bullets, numbers tables)</li> <li>Add user instructions/help feature</li> <li>Add a search feature</li> <li>Add an interactive map of zoo with animal images as links (rather than just listing animals)</li> <li>Use of backgrounds/colours, eg safari theme/jungle theme</li> <li>Centre the title</li> </ul>			3

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (b) (i)	Suitable definition of 'Sans-Serif' such as:  (The font) does not have the small lines/strokes /serifs/flicks at the edges of the letters.	'Not a serif font' or similar		
	1x1			1

2 (b) (ii) Any two reasons from:  • They are easier to read (for people with lower literacy/eye sight or stylised fonts • Looks clear/easier to read at smaller sizes • Can be clearly displayed by most operating systems  • They are easier to read with screen readers would be used on a personal device set to the individual user. The information point would	Question Number	Answer	Do not accept	Additional Guidance	Mark
• Creates a more modern feel to the product  2x1  2x1  2x1  Accept easy to read without further explanation once only  2x1  point would be used in the zoo by many people so screen readers would not be used.	2 (b) (ii)	<ul> <li>They are easier to read (for people with lower literacy/eye sight problems) than 'Serif' or stylised fonts</li> <li>Looks clear/easier to read at smaller sizes</li> <li>Can be clearly displayed by most operating systems</li> <li>Creates a more modern feel to the product</li> </ul>	with screen	readers would be used on a personal device set to the individual user. The information point would be used in the zoo by many people so screen readers would not be used.  Accept easy to read without further explanation	2

Question Answer Number	Do not accept	Additional Guidance	Mark
Any one benefit from:      Screen (layout) will be more consistent     (Saves time as) only new elements/information need adding/screens don't need to be made from scratch     Can make global changes easily to all screens that use the template	of how/why		1

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (c)(ii)	A description of a transition such as:  An animation/effect (1) shown when moving from one screen to another (1)		Allow description of an example.	
	1+1			2

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (d)	<ul> <li>Any three reasons from:</li> <li>Users will only use the system occasionally</li> <li>System will be for 'quick' searches (so should be intuitive)/users will not persevere if difficult to use</li> <li>Users will have a range of ICT capabilities</li> <li>User/audience will have a wide range of abilities /literacy levels/accessibility requirements</li> <li>Poor user experience will reflect negatively on the zoo</li> <li>3x1</li> </ul>		Accept opposite case for mark point 5 e.g. good user experience will reflect positively on the zoo	3
1	5/1			_

Questio n Number	Answer	Do not accept	Additional Guidance	Mar k
2 (e)	Any <b>two</b> accessibility features from       Adjustable font     Resizable font     Zoom function     Adjustable colour contrast     `Listen to this page'  2x1	<ul> <li>Scree         n         reader         suppor         t         <ul> <li>Alt</li> <li>text</li> </ul> </li> <li>These         would use         very         personal         hardware         and         software         settings         so would         not be         suitable         for the         given         context.</li> </ul>	Responses that include font/colour should make reference to ability to adjust/change/customis e these elements by the user .	2

Total for Question 2 – 14 marks

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (a)	<ul> <li>Any four from:         <ul> <li>Align data entry fields/labels</li> <li>Put data entry fields in a sensible order</li> <li>Add drop down list for title/number of adults/number of children/payment method</li> <li>Radio buttons for title/payment method</li> <li>Add a calendar/date picker/auto complete to date</li> <li>Add a validation rule</li> <li>Add help messages</li> </ul> </li> </ul>	ассерс	To gain credit for features such as radio buttons/drop down lists, responses should identify an appropriate field e.g. 'drop down for title'.  Drop down list can be credited more than once if candidate provides appropriate uses/examples in each case.	4

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (b)(i)	Candidate provides a sketch of a data entry screen.  Award one mark each for inclusion of the following  • 'Customer Booking Search' as screen title • Booking Reference data entry field (must include label and suitably sized data entry box, approx 5 characters) • Surname data entry field (must include label and suitably sized data entry box, approx 20 characters)	accept	The diagram must show a difference in the length of the two data entry boxes. Both should be a suitable size.	
	• <b>Submit</b> button 4x1			4

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (b) (ii)	В			1

Question Number	Answer  Award <b>one</b> mark for each correctly completed cell				Do not accept	Additional Guidance	Mark			
3 (b) (iii)			able for tes			y comp	ietea ceii		Action required	
		Test Description of Test Expected Actual Action	make							
		1	Check surname field only accepts text characters	Smith	Data entry accepted	Data entry accepted	No action required		to validation or similar.	
		2	Check surname field only accepts text characters	9sd5478	Data entry rejected	Data entry accepted	Add/fix Validation rule for surname		Similar.	
							2x1			2

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (b)(iv)	Explanation of reasons for testing in busy environments such as:			
	Tests how easy it is to enter information accurately (1) as busy environment/zoo entrance is likely to be more distracting (1)			
	Testing the system's ability to check for errors (1) as mistakes are more likely when user is rushed or distracted (1)			
	Test system in a similar environment to where it will be used (1) to get more useful results from testing/check it is fit for purpose (1)			
	Load testing /ensuring system can handle heavy usage (1) so it performs as expected (1)			
	1+1			2

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (b) (v)	Explanation of why re-testing is needed.  Award one mark (max 3) for inclusion of the following:  • Check changes/improvements have been successful • Changes made might affect functionality of the database/Designer might accidentally change things that worked previously • Check no corruption/errors have occurred when saving/exporting latest version • Check that functionality etc of new version still meets original user requirements			
	3x1			3

Total for Question 3 – 16 marks

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (a) (i)	Explanation of how moodboard would be used:  Award 1 mark for 'who with/when used'  • Used at the start of the design process (1)  • Produced with customer/Sonia (1)  Award 1 mark for 'how used'  • to get ideas for the design and content (of the e-zine) (1)  • to influence the choice of colours, font etc in early design stages (1)	ассерс	Guidance	2
	1+1			

Question	Answer	Do not	Additional	Mark
Number		accept	Guidance	
4(a) (ii)	Explanation of how a storyboard would be used such as:  Award 1 mark for 'who with/when used'  • based on moodboard or other initial client discussions/contact (1)  • at early stages of design process/before implementation of product (1)  Award 1 mark for 'how used'  • to sketch initial design/layout ideas (1)  • shown to the customer/Sonia to get feedback on design (1)  • to inform design, layout and content of early versions of e-zine (1)	иссерс	Guidance	
	1+1			2

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (b) (i)	<ul> <li>Any one aspect from</li> <li>Pixelated picture</li> <li>Font used for "Meet George" text</li> <li>Lion headline difficult to read</li> <li>E-zine name overlapping image</li> <li>Poor cropping of giraffe image</li> </ul>		To award a mark it must be clear which feature the candidate is referring to.	
	1x1			1

Question	Answer		Do not	Additional	Mark
Number 4 (b) (ii)	Explanation of impact of feat 4ci, containing points.	ure identified in	accept	Guidance	
	Feature Pixelated picture	Impact  Difficult to tell what image is (1) people with low literacy may need the image to help understand the text (1)  Gives a poor first impression (1) readers will not be encouraged to read more (1)			
	Font used for 'giraffe' text	Chosen font may be difficult to read for some (1) some users may miss out on information (that they would have liked to know) (1)  Young readers/readers with poor literacy/visual impairment (1) may not be able to read the chosen font easily (1)			
	Lion headline difficult to read	Key information may not be noticed (1) customer may miss something that would be of interest/use to them (1)			
	E-zine name overlapping image	This may make the text hard to read/obscure the picture (1) which would reduces the impact of the title/image(1) Gives a poor first			
	Poor cropping of giraffe image	impression (1) readers will not be encouraged to read more (1)			
		1+1			2

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (c) (i)	Candidate provides a diagram of a new folder structure:  Award <b>one</b> mark for each of:		Root = E- zine or similar (not new folder)	
	Suitable Root Folder (1) Suitable level 2 of hierarchy (1) Suitable level 3 of hierarchy (1)		Level 2 = templates folder plus other sensible folder names e.g. issue 1, issue 2	
	(3x1)		Level 3 = sensible sub division of folders such as issue 1 divided to Articles and images folders	3

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (c) (ii)	A suitable explanation of benefit of candidate's suggested file structure  Award one mark for each valid suggested benefit of the new file structure (max 2)  For example:  Root folder renamed E-zine to as Moorland Zoo folder may contain a number of different digital products (1)  Level 2 separated (into templates folder plus other sensible folder names e.g. issue 1, issue 2) keep assets separate/help to locate any previous material if it needs to be reused (1)  Level 3 sub division of folders (such as issue 1 divided to Articles and images folders) to allow designer to quickly identify where assets are to be placed in the e-zine/ to quickly find things that need updating/editing (1)	"find things more quickly" without specific reference to the feature of the new structure that provides this benefit	Explanation must clearly be in reference to the candidate's suggested structure (4 c i)	
	(1+1)			2

Question Number	Indicative Content
* 4 (d)	Description of ways to ensure consistency within digital products and evaluation of that method including:
QWC	Repurposing of materials from other products made for the zoo to ensure consistency of style across all products.  • Some repurposed images may not suit the new product fully and not create as good an impression on the user  • Repurposing an image that has already been edited may lead to a lower quality image and therefore a lower quality final product
	<ul> <li>Development of a house style to identify colours, themes, fonts etc to be used across all zoo products.</li> <li>House style increases brand recognition improving awareness of the product/company</li> <li>The house style may restrict design creativeness especially if trying to adapt part or all of a product to suit a different audience</li> </ul>
	<ul> <li>Use of common elements to achieve consistency – e.g. page numbers, foot notes, headers etc always in the same place and in the same style</li> <li>Use of templates to create consistency between pages/screens within a product and/or subsequent issues/iterations</li> <li>Common layouts make the products 'familiar' improving user enjoyment</li> <li>Common layouts to navigation improves ease of use widening the number of potential users for the product</li> <li>Template assumes a similar size/dimension of screen and distortion may occur when used on devices of different type and/or specification</li> <li>Unnoticed errors in the template/CSS would have a knock on effect across a number of pages/screens</li> <li>Use of CSS can help apply consistency quickly across a product</li> </ul>
	<ul> <li>User testing/proof reading to check/ensure consistency</li> <li>Test users would come at the design with a fresh outlook so may notice inconsistencies that were missed when the designer was checking the product</li> <li>Test user brief would need to be very clear as comments on some aspects of the success of design can subjective.</li> </ul>
Level Mark	Descriptor
0	No rewardable material.
1 <b>1-2</b>	Using a number of simple statements the candidate identifies a limited number of ways to achieve consistency within digital products. The candidate's response may focus

		on the principles of achieving consistency (e.g. keeping the font the same) but with little or no evaluation of these methods.  The candidate uses everyday language and the response lacks clarity and organisation. Spelling punctuation and the
	2.4	rules of grammar are used with limited accuracy.
2	3-4	The candidate identifies a number of ways that consistency could be achieved in digital products.
		They provide some evaluation of the impact of the methods
		they identify but may focus on only positive or negative or
		their discussion is quite general.
		The candidate uses some specialist terms and the response
		shows some focus and organisation. Spelling, punctuation
3	5-6	and the rules of grammar are used with some accuracy.  The candidate clearly explains different ways that
	3-0	consistency could be achieved in digital products.
		angital production
		They use well chosen examples (where appropriate) to
		support the points that they make. They evaluate the impact
		of their identified methods, considering a range of positive and negative aspects.
		aa
		The candidate uses specialist terms consistently and the
		response shows good focus and organisation. Spelling,
		punctuation and the rules of grammar are used with considerable accuracy.
	<u> </u>	Total for Overtion 4 19 morks

Total for Question 4 - 18 marks

Question Number	Answer		Do not accept	Additional Guidance	Mark
	Candidates	identify a design feature each of the aims.  Design feature  User instructions Clear/simple navigation Icons on slide show controls Simple language Easy to read font Welcome text contrasts background Font suitable for all ages/abilities Images of animals/zoo 'jungle'/'wild' theme 'jungle'/'wild' theme Interactive (navigation/multim edia controls) Multimedia features (Videos/Slide shows)			Mark
		<ul> <li>snows)</li> <li>High quality images</li> <li>Friendly language</li> </ul> dates must provide a ature for each aim.			
		4x1			4

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (b) (i)	Downloading/download	Сосорс		1

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(b) (ii)	Any <b>one</b> method of compressing video from:  • (Using a) Codec • (Using video editing software) export to a different file format	'reducing resolution'		
	1x1			1

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (b) (iii)	Award <b>one</b> mark each for any <b>two</b> benefits of compression from:  • (reduced file size) makes uploading/downloading easier  • Will take up less storage space if downloaded  • Pages with video in will load quicker  • Less likely to buffer/lag when being streamed 2x1	"Streams faster"	Responses should be the benefits of using compression not the outcome	2

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (b) (iv)	Award <b>one</b> mark for any two drawbacks of compression from:  • May result in lower quality video • Users may have to install additional software to view the video • Users with lower ICT skills may not know how to access/install software to view the video (if in an unusual file format) • May reduce the range of digital devices it can be viewed on (due to file compatibility) • Loss of metadata		Responses should be the drawbacks of using compression not the outcome	2

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (c)	Explanation of why a site map is used when planning a website such as:			
	To plan/keep track of pages (and the main content) that will be created (1) and how they will link together/the navigation routes (pathways) through the website (1)			2
	<u>                                     </u>			2

Question	Indicative Content
Number	
* 5 (d)	Candidates analyse how multi-sensory website affects user experience.
QWC	<ul> <li>Enhancement of user experience:         <ul> <li>Combining multimedia components will engage users and keep their attention for longer</li> <li>Combination of different senses e.g. sound/narration/videos etc may support users with disabilities/low literacy etc</li> <li>Use of more than one sense may assist user in understanding and/or retaining information</li> <li>Increased 'interaction' with the site will improve users' enjoyment and encourage them to use it again</li> <li>Combinations of high quality media and informative text, would support research/information gathering before going to the zoo, (such as for a school trip) by presenting information in a way that meets the users preferred style of learning/interaction</li> </ul> </li> <li>Detraction from user experience:</li> </ul>
	<ul> <li>Site may be resource heavy and may not run on lower specification devices</li> <li>The high level of resources may mean slower internet connections may struggle to load the content sufficiently quickly to keep users' attention</li> <li>The increased file/page sizes from combining elements may cause users who access the site via mobile devices to incur high data charges</li> <li>Placing too many videos or other content on a page may make it difficult to effectively view/use the screen on the smaller screen of a mobile device</li> <li>May need the user to install specialist software/plug-ins in order to make use of the full features of the site. This may restrict users with low ICT skills form using the site.</li> <li>Some users may be overwhelmed by too much content and be reluctant to use the site</li> <li>May reduce the ease of use if too much is going on</li> <li>May need additional hardware such as speakers/headphones</li> <li>May not be compatible with accessibility devices</li> <li>Some media elements/interactive content would work better with certain hardware (e.g. drop don't menus don't always work well with touch screen devices) and may therefore limit how people can access the site</li> </ul>

Level	Mark	Descriptor
	0	No rewardable material.
1	1-2	Using a number of simple statements the candidate identifies some ways in which combining elements affects user experience. These may focus only on positive or negative aspects Discussion is general and may not always be accurate. The candidate uses everyday language and the response lacks clarity and organisation. Spelling punctuation and the rules of grammar are used with limited accuracy.
2	3-4	The candidate identifies a number of ways that combining elements will affect user experience.  They analyse how the methods they identified affect the user experience, both positively and negatively. The candidate provides some discussion of how these combinations will affect the zoo's users.  The candidate uses some specialist terms and the response shows some focus and organisation. Spelling, punctuation and the rules of grammar are used with some accuracy.
3	5-6	The candidate identifies a range of ways that elements could be combined to provide a multi sensory user experience. The candidate clearly explain how these elements would affect the users of the zoo's website  The candidate uses specialist terms consistently and the response shows good focus and organisation. Spelling, punctuation and the rules of grammar are used with considerable accuracy.

Total for Question 5 – 18 marks Total for Paper – 80 marks