Mark Scheme (Results)

Summer 2017

Pearson Edexcel GCSE in Information and Communication Technology (5IT03) Paper 01

Unit 3: 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) (i)	Any **two** from: • Copy / Paste • snipping tool • Clone/duplicate • Stamp • Rotate • Select/magic wand/lasso		Accept alternative/software specific wording/names of tools	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (a) (ii)	A			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(b)(i)	Any **three** from: • Have competition logo on both • Put competition name/title on both • Use same font (sizes/styles) • Use similar image styles (e.g. all actual images / all cartoons) • Use the 'strap line' on both • Use photos that show competition identity (e.g. venues, event logos on clothing) • Use same layout			**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(b)(ii)	An explanation of why both a website address and a QR code should be included such as: Users may not be able to scan the QR code (1) due to the poster's location / what the user is doing (1) QR code is unreadable (1) due to printing/paper issues (1) It is a printed advert (1) so you can't click the link / need alternative method of opening the URL (1) Not everybody has a device/software for scanning QR codes (1) which reduces the number of people who can access the information/book tickets (1) Users access the internet in different ways (1) providing both will increase the number of people who can access the information/book tickets (1) QR code is not human readable (1) URL can be remembered (and entered later) (1)			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (b)(iii)	D			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (c) (i)	Visual Hierarchy		Accept any recognisable spelling	**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (c) (ii)	Any **two** ways to use animation to draw attention from: • Make **only** key information move • Change the order in which information appears (e.g. have most important information appear first or last) • Make key information stay on screen longer • Make text grow • Add colour change effect • Loop/repeat a specific animation	'Make it move' on its own	For MKPT 6 - Accept examples/descriptions of animations that can be used (e.g. arrows pointing at key information)	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (d)	Any **two** from: • Seek permission to use it (from copyright holder) • Use content that provides permission to use (e.g. creative commons licences) • Check/adhere to the licence/copyright (terms) • Use 'public domain'/copyright expired sources • Commission/purchase content			**2**

Total for Question 1 – 14 marks

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (a)	C			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (b)	Example response			

Award **one** mark each for: • All fields have spaces for data entry • Data entry fields sized appropriately • 'Date of Birth' field formatted to aid entry/improve accuracy (e.g. DD/MM/YYYY boxes. Calendar/date picker) • Category uses dropdown or radio buttons		To award sizing mark the fields should be sensible for their use (e.g. 'Title' is smaller than 'Name').	**4**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (c)(i)	Any **two** features from: • 'Listen to this page' feature • (Enable/allow) screen reader support • Adjustable font (type) • Adjustable font **size** • Zoom/magnifier			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (c) (ii)	Any **two** reasons from: • Legal requirement • Moral / ethical obligation • Improves accessibility for **all** users /users with impairments • Increase number of potential users / return users • Improves company's reputation			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (c) (iii)	Any **two** ways from: • Place text on the buttons/make it clearer if the button or text is the link • Align buttons/links/menu options • Make buttons consistent size • Use a more legible/clearer/easier to read font • Add an exit button • Add help option • Reduce the size of the logo • Difference between heading/text size / increase heading size **Accept** Examples of suitable fonts that could be used for mark point 4.			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (d)	Award **one** mark for a suitable file type and two marks for a suitable explanation. **Type-** Vector (1) Allow vector file extensions e.g. SVG/EPS **Why suitable –** Can be resized (1) without losing quality (1) Supports transparency (1) so can be placed on a range of backgrounds (1)		File type accepted anywhere in the answer	**3**

Total for Question 2 – 14 marks

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (a)	Any **one** from: • Structure diagram • Sitemap • Hierarchy diagram		Allow any recognisable spelling	**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (b) (i)	Any **two** from: • Layout (of the website/pages) will be consistent • Saves time (setting up) • Enforces house style/branding • Minimizes errors • Can make universal changes		Award 'consistency' on its own only if layout or house style not already awarded	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (b) (ii)	A linked explanation such as: (Button 2) does not use text (1) which aids users with lower literacy levels/a first language other than English (1) Use of an image (1) helps users recognise the purpose (1) (Button 2) is commonly used (1) which makes navigation more familiar for users (1)		Allow points and expansions from different examples providing they make sense	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (c)	A description of how 'Alt text' supports users with poor internet connections, containing any **two** from: • Provides a description of the image/conveys same meaning and information as the image (1) • So users can turn images off/images do not need to be loaded (1) • Reduce amount of data downloaded (1) • In order to improve loading times (1)		'Loads faster' or similar only accepted as part of a description. Linked response required for two marks.	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (d)	An explanation to include any **two** from: (The image) is a bitmap / made up of (many) pixels(1) The number of pixels do not change (1) Original resolution is lost (1) The image is not redrawn (1) **Allow** 'Each pixel is enlarged' for 'original resolution is lost'		Accept reverse arguments related to vector	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (e)	An explanation of how roll over helps optimise use of screen space such as: Menus/submenus will expand/appear when needed (1) if the mouse is positioned on the menu (1) providing more space for other content (1) Some menu items are hidden (1) so more content can be shown on the screen at once (1) reducing the need to scroll (1)			**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (f)	Two linked explanations such as: Desktop computers are usually more powerful (1) so can handle more multimedia content (1) Greater range of input devices used (e.g. mouse, keyboard etc.) (1) provide opportunities for different interactive features (1) Screen size is usually larger (1) so more can be shown on the page at once (1) Less likely to be accessed on a mobile data connection (1) so more can be included on the page without significant impact on load times (1)		Allow responses phrased in the negative for use of mobile sites e.g. "Mobile devices often use cellular data, meaning they can take longer to load"	**4**

Total for Question 3 – 16 marks

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (a)	Any **two** ways from: • Icons will be usually larger (than when using a mouse, fingertip) • Greater spacing between buttons/icons (to avoid accidental pressing) • Can incorporate multi touch functions • Alternative actions for common functions will need to be used (e.g. long touch for right click) • 'Roll over' functions will not be possible	'Avoid scrolling'		**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(b)	A linked explanation such as: May be awkward / uncomfortable to use (1) due position of screen (mounted on the wall) (1) Touchscreens / on-screen keyboards reduce speed of data entry (1) because of slow response times / may need multiple presses for caps or numbers etc. (1) Screen can get dirty due to fingerprints (1) making it difficult to see content / less responsive (1)			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (c) (i)	Any **two** from: • The user has asked for more time (Yes outcome from 'Has user pressed 'yes'?') • The user has said they do not require more time (Yes outcome from 'Has user pressed 'no'?') • The timer has exceeded 10 seconds (Yes outcome from 'Is Timer >= 10 seconds?')			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (c) (ii)	An explanation such as: In case a user leaves a screen open (1) the information point will close the screen / return to the menu (ready for the next user) (1) To give a user time (1) to respond / read the message (1) Close the screen automatically (1) after 10			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(d) (i)	Any **two** characteristics from: • Age • **First** language • Disabilities		Allow any recognisable spelling.	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(d) (ii)	An explanation such as: They will have the same characteristics / expectations / needs (as the target audience) (1) so test results will be valid (1)		Accept reverse arguments	**2**

Question Number	Indicative Content

* 4 (e)
 	
QWC
	Indicative content
	
	Content:
	• Wide ranging audience so:
	    o May consider different types of media e.g. Video, images, text
	    o Language will need to be understandable for different age and education levels
	    o Audience will be from a range of beliefs and backgrounds so will need to ensure none of the content discriminates or offends
	    o The information point may be used by people with lots of knowledge about a sport or by users with very little knowledge. The designer will have to get the balance of technicality and explanation right
	• Purpose – a public information point
	    o Media and text should be short and to the point as there may be a number of people waiting to use it
	    o Will be used in a public place so will need to consider how audio content can be delivered or if it should not be used
	    o Will need to provide a wide range of information about the venues and sports,
	
	Functionality:
	• Wide ranging audience so:
	    o offer alternative navigation and viewing options to support users of differing abilities
	    o Many users will be from other countries so provide options to translate the text in to different languages
	• Purpose a public information point:
	    o Interaction will have to be optimised for a touch screen interface
	    o Users will only use the system occasionally so the interaction should be intuitive to ensure the uses can use it quickly and with minimal help
	    o The information point should restrict users from closing the main program down to stop them accessing other functions of the device

		o Program may need an auto restart function to ensure that ut restarts if crashes or stops working.

Level	Mark	Descriptor
	0	No rewardable material.
1	**1-2**	The candidate identifies a **few** ways in which audience **or** purpose affect an information point. Examples are not always relevant to the competition. They **may not** focus on content **or** functionality. 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 in which audience **and** purpose affect an information point. Examples are mostly relevant to the competition. They **will** focus on content **or** functionality. 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 in which the audience **and** purpose affect an information point. Examples are relevant to the competition and **link** to audience and purpose. Response will discuss content **and** functionality. 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 4 – 18 marks

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (a) (i)	D			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (a) (ii)	C			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (a) (iii)	An explanation of the use of a timeline storyboard such as: Can check the movie will be the correct/required length (1) as the document provides a scale showing the (overall) timings (1) Can decide the duration of transitions/overlaps/videos (1) which will help the designer identify where cuts/edits should happen (1) Can see when each video/asset is played (1) and for how long (1)			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(b)	• Soundtrack/Music/background music • Voice over/narration/narrator			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (c) (i)	A description such as: Action/respond to feedback (1) retest video (1) to check actions are successful / no unintended changes have been made (1). (If no problems identified) the final video will be checked by client (Julianna) (1) against the brief (1) for approval (1).			**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (c) (ii)	An explanation of why versioning is used including **three** from: Aids documentation of testing/changes (1) showing the most up-to-date product (1) so the designer can 'roll back' (to previous version) (1) if there is an error/file becomes corrupt or different creative direction (1).			**3**

Question Number	Indicative Content
* 5 (d) **QWC**	A discussion of the factors that the designer should consider to ensure a good user experience for the video. Discussion to include areas such as: • Choice of file type ○ Quality vs size ○ Compatibility with different platforms ○ Use of codecs ○ Need for users to install additional software … • Implications of download vs streaming • Use of compression ○ Benefits and drawbacks ○ impact on user, website and video • Copyright: ○ Use of DRM ○ Providing permissions/restricting sharing • Impact/appropriateness of content

Level	Mark	Descriptor
	0	No rewardable material.
1	**1-2**	Candidate identifies a **few** factors which should be considered when **sharing** the video. 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 factors which should be considered when **sharing** the video **online**. There is **some** consideration of **how** the identified factors **impact** on the **user experience.** 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 factors which should be considered when sharing the video **online**. The candidate provides **relevant** examples of how the factors **impact** on the **user experience**. 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