

Paper 2C

	Marks
1. (a) (i) The text will be shown when the web page cannot display the image. / Move the mouse pointer over the image. /	1
(ii) For the visually-impaired, the text can be converted to speech / read by software / used for refreshable Braille display.	1
(iii) (1) The width is fixed at 600 and the height will remain at 400.	1
(2) The size is 300×200 and the aspect ratio is kept.	1
(3) The height is fixed at 200 and the width will be 300. (The aspect ratio is kept in the three cases.)	1
(b) (i) The hyperlink will be opened in another browser.	1
(ii) The parent frame (upper one) is the root (full body of the window).	2
(c) (i) The viewable screen size for the target web pages is larger. / More information can be shown. / It is more suitable for mobile devices with a small screen size. / It is print-friendly.	1
(ii) Users do not have to press 'back' and 'forward' buttons to visit different pages (navigation).	1
(d) (i) Add anchor tags.	1
He can put the anchor for every certain number of paragraphs. Clicking the links (buttons) will jump the cursor back to the top of the web page. (usage)	1
(ii) Clicking OK button may not result in showing a web page in the right frame. Web pages with some options may not exist.	1 1
2. (a) (i) No, it is not directly played by an electronic instrument. / Yes, the piano has a MIDI output. / Yes, MIDI software is used to extract the background music.	1
(ii) It only includes an instruction set and notes to instruct a sound card to make different audio effects, and no actual audio play is stored in the file. (storage structure of MIDI & MP3)	1
(iii) The file in WAV format contains more information and it facilitates better audio editing. (quality) The file in MP3 format is smaller and it facilitates the web surfing. (size)	1×2
(b) (i) S has more noise because it has a lower sample size. (uses 8-bit sample size)	1+1
(ii) Q = 2.5	1
R = 10	1
S = 5	1
(c) Add transcript of the speech. / Use text-only web pages. / Use video with sign language. Let the needy students read. (screen reader)	1 +1
(⓪ item + ① explanation)	
(d) Simplify the layout of the web pages. Compress the audio files further. Reduce the resolution of the images. Remove unnecessary multimedia elements (such as background music). Build a text-only version. Make the font adjustable.	1×3

- Marks**
3. (a) (i) $8 \times 6 \times 1200 \times 1200 \times 3$
 $= 198 \quad (197)$ 1
1
- (ii) For 'lossless',
the file size is larger; 1
the file keeps all the information of the image without data loss while the other one does not; 1
the file keeps the colour depth while the other one may diminish the colour depth (colour depth remains unchanged/number of colours decreases) for better compression performance in general. 1
- (b) (i) Set no border (table setting). 1×2
Cut the image into small fragments.
Put the fragments of the image with the text into appropriate cells.
- (ii) layering (CSS) / graphics editing software
The editing / preparation work is simpler.
- (c) (i) It leads to a blinking animation in (2) as a blank frame will show every 0.1s and last for 0.1s. 1, 1
(ⓐ blink ⓑ explanation)
- (ii) The two animations look the same. For (1), each frame lasts 0.2s. For (3), each frame lasts 0.1s but two identical frames displays consecutively, leading to the same visual effect as (1). 1+1
(or The refresh rate in (3) is higher and the display may lead to blinking.)
(ⓐ conclusion + ⓑ explanation)
- (iii) It possesses sound feature / user interaction / a higher colour depth / a smaller file size (vector). / 1×2
Quality remains unchanged after resize.
4. (a) Benefit (Mr Li): The data verification process is simpler. 1
Benefit (students): They can reduce the input errors. 1
- (b) (i) The script will be called when CLASS is set. 1
With this script, only the available class numbers and student names with the selected class will be shown in CLASS NUMBER. 1
- (ii) The corresponding student names will be selected and downloaded to the client browser which will increase the loading (server/bandwidth). 2
- (c) (i) Write a server-side script. 1
Acquire the 'counter' service from an external service provider. 1
- (ii) Add an option like "Please choose:" as the first/default option in each drop-down list. 1×2
Use radio buttons to implement options.
Use OK button to confirm every question.
- (d) Assign 1 to p[i] (p[i] = 1) 1
If ans[i] and choice are equal, 1
assign 1 to q[i]; otherwise assign 0 to q[i]. 1
(if ans[i] = choice then q[i] = 1 else q[i] = 0)
- (e)

Button	Script
% correct	<code>DISPLAY(100 * SUM(q) / SUM(p))</code>
Not attempted	<code>DISPLAY(n - SUM(p))</code>

2×2
- or n