

Paper 2C

		Marks	
1.	(a)	$(16 \times 2 \times 22.05 \times 1000 \times 60) / (10 \times 8 \times 1024 \times 1024)$ = 0.5 MB	1 1
	(b)	(i) More audio data in each sample is collected so that Mr Ho can recognise the improvement.	1
		(ii) Human beings are not easily aware of the increase of audio data with sampling rate greater than 44.1 kHz.	1
	(c)	(i) He can use the fade in, fade out effect such that the volume of the speech will gradually decrease while the volume of the school song will gradually increase.	1 1
		(ii) amplitude, loop / number of channels	1×2
	(d)	(i) $(2 \times 1024 \times 1024 \times 8) / (450 \times 1000)$ = 37.3 seconds	1 1
		(ii) Reduce the frame rate/resolution/compression ratio so as to create a video with a smaller file size and hence reduce the waiting time.	1
	(e)	(i) GIF is lossless compression.	1
		(ii) The greatest colour depth of PNG format is larger than that of GIF format.	1
		(iii) Cookies are used. The background colour of the web page is saved as a text file in the client computer. It will be retrieved when the user revisits the web page. / (or server-side scripts)	1, 1
2.	(a)	(i) Server-side scripting is used to check whether the username has been used and stored in the database.	2*
		(ii) Client-side scripting is used to compute the strength of the password.	2*
		(iii) Do not allow the user to copy and paste the password in the field 'Re-type password'.	1
	(b)	Hyperlink: C	1
		Style sheet: A – Define the layout and apply it to the entire web page. / Apply an external style sheet to the document. C – Define the layout and apply it to the specific segment. (inline style sheet)	2*
		Metadata: Include information about the web page such as keywords so as to increase the chance of being searched by search engines	1
		A – It can only be used in this part.	1
	(c)	(i) No specific software package is required for creating the button.	1
		(ii) It is easy to create lively, complex animation effects.	1
	(d)	It can be displayed as one image by enlarging it to be 800 × 600.	1
		It can be displayed as tiles by repeating it both vertically and horizontally.	1

		Marks
3.	(a)	1
		1
	(b)	1
	(c) (i)	1×2
	(ii)	2*
	(d)	6
	(e) (i)	1
	(ii)	1

		Marks
4. (a)	Use two-level verification. (double passwords) Answer personal questions. Use a randomised numerical keypad to enter. Use captcha. Users have to wait for a few seconds to re-enter the information when the input is incorrect.	1×2
(b) (i)	- Total quantity of a single toy item - Subtotal of a single toy item - Stock of a single toy item with brief description  (*column of selected items, button, pull down menu, check box)	1×2
(ii)	When '-1' button is clicked, if $P[i] > 0$ , $P[i] \leftarrow P[i] - 1$	1 1+1
	Condition ① Decrement of the content of the variable ① Mention $P[i]$ or any example of $P[i]$ ①	
(c) (i)	It keeps the original web page and saves time to re-load the page when the 'Cancel' button is clicked.	1
(ii)	colour, size, location, title, opacity	1×3
(d)	Do all the payment at a time. Compare different items. Keep the items for purchase next time.	1×2
(e)	The display size is different. (layout) The file size should be smaller because the effective data transfer rate of mobile devices is limited. The file format should be changed for different operating systems. (compatibility)	1×2

\* Marking criteria

- ② Illustrate a logical and concrete answer
- ① Illustrate a relevant answer