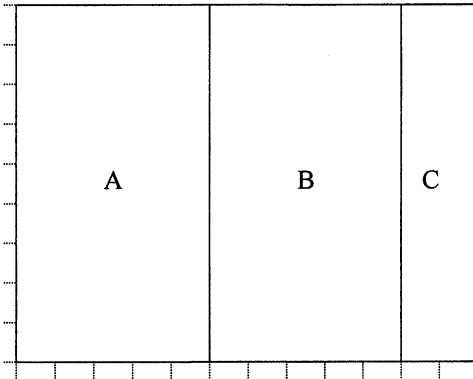


1. (a) (i) The image will not be distorted/blurred (quality) when the window is enlarged. /
The image can be resized without any loss of information and there will not be ragged edges in
the image after the resize. /
The file size is smaller. 1
- (ii) It is commonly used and can be read by most bitmap-based software / browsers. (different
platforms/OS) 1
- (b) Adjust the display locations on the screen. 1
Adjust the size (width/height) of the popup window. 1
- Or give an example:
`window.open(href, windowname, 'width=400,height=200,left=50, top=100, scrollbars=yes');`
- (c) (i) Client-side scripting is used to check the blank input. 1, 1
(ii) Server-side scripting is used to validate the constellation stored in the database in the server. 1, 1
- (d) (i) GIF / PNG 1
(ii) The map and the images are overlaid with each other. The images can be controlled by CSS
codes so that the image with the selected walking path is shown while the other images are
blocked. 1
- (e) (i) The sound is authentic. / It comprises human voice. 1
(ii) The file size is smaller. / Precise edit can be conducted easily. 1

(f)



horizontal / column frames ①

A, B size equal ①

C size = 200 pixels ①

3

		Marks
2. (a)	<p>It helps web developers understand the structure of the web site. (topics / categories / content / information / hyperlink)</p> <p>It helps users navigate the web site. (the target page)</p> <p>It encourages search engines to index the entire school web site. (keywords to search engines)</p>	1×2
(b) (i)	Anchor (button / hyperlink back to top)	1
(ii)	Create a printable version and use CSS to avoid a page break in the paragraph.	1, 1
Reference:		
<pre> <style> p.Unbreakable{ page-break-inside: avoid; } ... </style> <body> ... <p class "Unbreakable">School motto
Love our children! ... </pre>		
(c) (i)	It can attract users' attention. (more interactive elements)	1
(ii)	No, users will be difficult to click the link when it is moving.	1
(d) (i)	Apply a style to the entire web page.	1, 1
(ii)	Apply the same style to the web pages in the web site when necessary.	1, 1
(e)	<p>Reduce the frame rate (FPS).</p> <p>Reduce the resolution.</p> <p>Limit the number of network connections / the number of viewers / the multicast.</p> <p>Increase the bandwidth.</p> <p>Increase the compression ratio / Use a file format with a higher compression rate or small file size.</p> <p>Reduce the bit rate.</p> <p>Stop other services in the server.</p>	1×3

	Marks
3. (a) (i) grouping	1
(ii) flipping (mirroring)	1
(b) (i) tween	1
(ii) time interval between two images / frame rate duration total number of images/frames	1×2
(iii) MP4 supports menus/subtitles/chaptering. MP4 is fully compatible with H.264 (e.g. better compression). / smaller file size MP4 can be directly embedded within the HTML5 Internet standard. (easier to be inserted in web pages)	1×2
(c) (i) $500 \text{ kbps} \times 60 \text{ s} = 3.6 \text{ MB}$ (3.5MB to 4MB or equivalent) The actual file size is much smaller because data <u>compression</u> is used in the video.	1 1
(ii) $(10 \times 1024 \times 1024 \times 8) \div 16 \div 2 \div 60 = 43.7 \text{ KHz}$ (40KHz to 44.1KHz or equivalent) ① dealing with the stereo in the expression	2
(d) (i) Diffusion, polarizer, red eyes, contrast, brightening, blur, noise, water mark (with description or self-explained examples)	1×2
(ii) 1024×540 ① Correct aspect ratio (in whole number) less than 1024×540	2

		Marks
4. (a)	It has smaller file size. / It supports form filling. / It supports text copying. / It can be read by screen reader programs. / It can contain multiple images. / It can include multimedia elements (e.g. audio and video). / It can include hyperlinks. / The text can be shown clearly (without zigzag) when its size is increased.	1×2
(b) (i)	The question page and the answer page are not synchronized / not in the same horizontal line. Note: accept concrete examples such as 'It is very easy to answer Q8 in the text box of A7.'	1
(ii)	Combine two frames / iframe / one-by-one Each design: Draft - practical (Synchronized) ① Design - concise (Navigation) ① Explanation - clear ① Note: 1. The design should be workable if there are more than 10 questions. 2. For two similar designs, award the design with the higher mark only.	2×3
(c) (i)	2 + 4 3 + 6	1 1
(ii)	All questions depend on Question 1. (predictable) / Q is 2 times of P. / All answers are multiples of 3	1
(iii)	For i from 1 to N P[i] ← MyRand() Q[i] ← MyRand() or P[i]*2 Or temp = MyRand() For I from 1 to N P[i] = temp Q[i] = temp *2 temp = temp + 1	① iterations ① Assignment (index i) ① All correct 3