2010 HSC Industrial Technology
Multimedia Technologies
Sample Answers

This document contains 'sample answers', or, in the case of some questions, 'answers could include'. These are developed by the examination committee for two purposes. The committee does this:

(a) as part of the development of the examination paper to ensure the questions will effectively assess students' knowledge and skills, and

(b) in order to provide some advice to the Supervisor of Marking about the nature and scope of the responses expected of students.

The 'sample answers' or similar advice are not intended to be exemplary or even complete answers or responses. As they are part of the examination committee's 'working document', they may contain typographical errors, omissions, or only some of the possible correct answers.

Section II

Question 11

Answers could include:

- Compressed
- Converted to MP3

Question 12

Sample answer:

Streamed video is faster to load because it does not require the whole file to be downloaded before viewing.

Question 13

Sample answer:

Cascading style sheets allow all styled features to be formatted in a predetermined manner. To make changes to a formatted item, the cascading style sheets only need to be changed once. If further formatting changes are required they can be achieved by amending the HTML code directly.

Question 14

Sample answer:

Lossy and lossless compression.
Lossless compression, no information from the original file is lost and can be compressed to the original.
Lossy compression can result in smaller file sizes therefore faster transfers.

Question 15

Sample answer:

Vector images are fully scalable and have smaller file sizes but may not reflect colour gradations as well as other methods.
Bit-mapped images will eventually pixelate when enlarged, can have massive file sizes therefore bloats presentation size. Can have excellent colour gradations.

Question 16

Sample answer:

The web designer would need to identify the client's requirements, including size, content, audience and multimedia features to be used.
- develops storyboards for client feedback
- builds mockups of website ideas based on feedback – these will then be reviewed by client
- begins initial build and testing – including colour, contrast, browser issues and navigation on an offline server
- confirms technical quality assurance and compliance with web protocols
- client tests website and signs off on product and arranges web hosting

Section III

Question 17 (a)

Answers could include:

Environmental considerations which may affect a decision to expand a company or relocate:
- Change in distance from markets/storage/logistics
- Change in distance from suppliers
- The type of manufacturing process involved in the production
- The opportunities to save or recycle waste
- The greater or lesser demand for utilities such as water, electricity, gas and storage
- The environmental consideration of relocating the staff

Question 17 (b)

Answers could include:

A small business must assess what stage the business is currently in (establishment, growth, maturity or post maturity phase) and what business plan they have for the next five years and/or succession planning. The business is relocating to enable expansion.

Structural Issues:
• Relocating will enable the adoption of new strategies in production layout, storage, prototype and development work
• The outsourcing of some production would permit demand and reduction in staff numbers or multi-skilling
• Promote multi-skilling, as job skill enlargement and/or job enrichment. It brings about better management structure with employees getting more responsibility, more job satisfaction, and probably more pay

Technical Issues:
• Opportunities to adopt new technologies both in production and administration
• Better production flow
• Better quality control measures can be introduced
• Introduce newest and latest means of production
• Enable a true comparison with competitors
• Where some jobs may become redundant, other new jobs will be established
• Gives opportunities for retraining/ multi-skilling

Personnel Issues:
• Trained, experienced and loyal staff members are a business's greatest asset.
• Any change must be 'sold' to staff emphasising the improvement and advantages they will be part of
• Change in technology and structure will infringe on staff and therefore care should be taken not to alienate key staff
• Key staff are identified by using a personnel skills audit process looking at an individual's experience, skills and personal qualities
• A change is also a chance to 'cull' personnel that fail to contribute
• Retrained, up-skilled, multi-skilled and loyal employees should be recognised publicly and rewarded