2011 Industrial Technology: Multimedia Technologies HSC Examination 'Sample Answers'

When examination committees develop questions for the examination, they may write 'sample answers' or, in the case of some questions, 'answers could include'. The committees do this to ensure that the questions will effectively assess students' knowledge and skills.

This material is also provided to the Supervisor of Marking, to give some guidance about the nature and scope of the responses the committee expected students would produce. How sample answers are used at marking centres varies. Sample answers may be used extensively and even modified at the marking centre OR they may be considered only briefly at the beginning of marking. In a few cases, the sample answers may not be used at all at marking.

The Board publishes this information to assist in understanding how the marking guidelines were implemented.

The 'sample answers' or similar advice contained in this document 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 (a)

Sample answer:

Bold, size, colour, font type, underline

Question 11 (b)

Sample answer:

The size of the colour bit-depth determines how many colours are available for use in a graphic. Low bit-depth can result in lower-quality images due to fewer colours being available.

Question 11 (c)

Sample answer:

A colour correction filter can be applied to the clips to adjust the amount of yellow and a brightness or contrast filter can be applied to lower the brightness and maintain contrast of the clips.

Question 11 (d)

Sample answer:

Motion capture techniques are the process of applying sensors to live actors or moving objects. These sensors allow for real-time capture of movement from multiple perspectives that can be automatically recreated in computer animations. The use of this technology creates a crash test animation that is true to life as well as allowing for different camera angles and speeds in a 3D space.
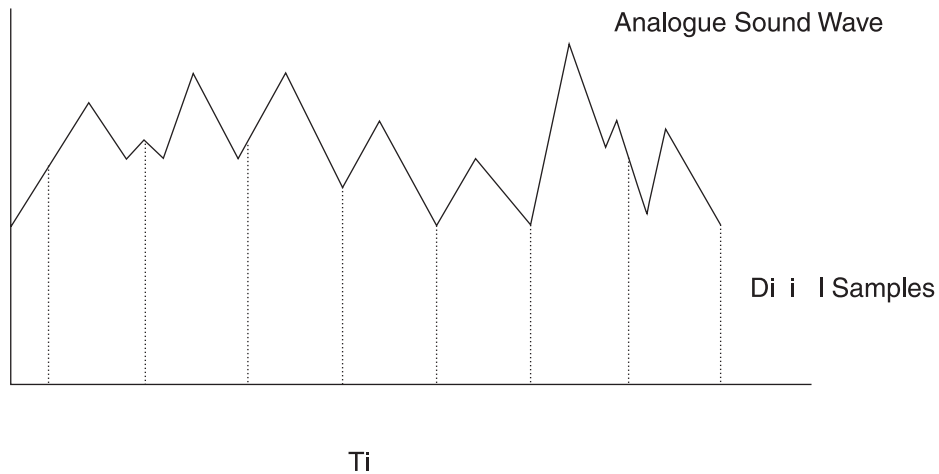
- Automatic production of 3D animation
- Multiple angles
- Real world physics are reproduced
- Fast production
- Safe process

Question 11 (e)

Sample answer:

A sample of the sound is captured via a microphone at regular intervals. This sample consists of an electrical signal determined by pitch and volume. This signal is assigned a binary number to represent the pitch and volume of the sound. The accuracy of the conversion is

determined by the sample rate and sample (bit) depth assigned to the analogue sample. The processing of this conversion occurs in the sound card.

Analogue Sound Wave

Di i l Samples

Ti

Section III

Question 12 (a)

Answers could include:

Personal issues should include:
- a core of experienced staff, particularly HR manager
- someone
  - who fully understands the company's policies, ethos and procedures
  - has the authority to make decisions
- recruit locals to build local profile and teamwork
- employment
- local or transferred from old site/parent company
- travel interstate – cost, family, emotional/financial
- training, multiskilling
- facilities, provision, room, toilets, showers etc
- legislation, EEO etc
- low morale issue that could cause distress or concern
- change in staff dynamics
- communication between management and staff about the expansion.

Question 12 (b)

Answers could include:

Factors other than personnel:

- location
  - near to market for products (outlets, material, transport)
  - near to labour supply – skilled and unskilled, local or transferred old site
  - near to supply of raw/input materials
  - suitable geographic conditions considering heat/humidity/flood/fire/snow etc
  - positioned well to compete with opposition companies
  - positioned well for storage, logistics, distribution and waste management
- state and local legislation and their effect on operations, hours, zone etc
- ensure that same quality of production as at parent company plant
- need for company to be able to act with some autonomy and not have to constantly seek approval of decision from 'head office'
- competition, market share, opportunities for growth
- marketing of new facility
- need for new equipment and/or technology
- ability to act with autonomy rather than constantly seek approval from 'head office'.