



## **2012 HSC Information Technology '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 16 (a) (i)

***Sample answer:***

- Physical harassment
  - pushing
- Psychological
  - disciplining in front of others

***Answers could include:***

- Physical
  - hitting, punching
  - being inappropriately physical
- Psychological
  - invasion of privacy
  - inappropriate language
  - raised voice

### Question 16 (a) (ii)

***Sample answer:***

An employee that is being harassed could firstly speak to the other person (offender) explaining how their actions are making them feel. They should also document the incident.

***Answers could include:***

- Reporting incident to manager
- Following company grievance policy
- Contact the union or seek legal advice
- Request mediation

**Question 16 (b)*****Sample answer:***

Examples of items that should be included in a hardware audit are:

- the serial number for positive identification and warranty
- the location of the device for repairs, replacement or to check for potential loss
- the service tag for manufacturer's warranty.

***Answers could include:***

- The date of the previous audit indicating last sighting of item and its location
- Staff member responsible for maintenance or to be contacted if item is missing or needing repair

**Question 17 (a) (i)*****Sample answer:***

When moving this box to another room a person must use a trolley or have another person help move it, as indicated by the 35 kg weight rating. The box must be kept upright as indicated by the arrow symbol. Do not place items on top of it as indicated by breakable glass symbol.

***Answers could include:***

- Use a trolley, as the box is heavy.
- Two people needed to lift the box because it is heavy.
- Keep box upright because symbol is ↑↑.
- Breakable objects inside box, move carefully without dropping.
- Bend the knees when lifting due to heavy weight (one person should not lift).
- Recycle is NOT a correct response.

**Question 17 (a) (ii)*****Sample answer/Answers could include:***

Chris needs to fill out an incident report and notify his supervisor. He then needs to have his injuries assessed by a doctor and his employer may need to modify his duties to compensate for any injuries.

The WHS supervisor should assess the area, move the cable to make it safe or block off the area until the space can be safe. The incident also needs to be reported to WorkCover.

**Question 17 (b)*****Sample answer:***

A workstation setup should contain an adjustable chair with adequate back support. The adjustable chair allows users to change the height and angle of the seat to meet their needs. By adjusting the chair height, users can view a computer monitor at the correct height to reduce neck strain. The workstation should also be located in a place with adequate lighting and minimal glare to prevent user eyestrain.

***Answers could include:***

- Signage of exercises to be carried out and remind users to have breaks to reduce carpal tunnel and RSI
- Adequate ventilation to prevent poor work efficiency and possible injury
- Tilting of screen to reduce neck strain
- Adjustable key height to reduce RSI

**Question 18 (a)*****Sample answer:***

The user should have waited for the files to be written to the USB device and then selected 'eject' to safely remove the device. Once the computer notifies the user it is safe to remove the device the user can take it out of the computer.

**Question 18 (b)*****Sample answer/Answers could include:***

- Format of USB must be compatible with both operating systems
- File type to be stored must be compatible with both operating systems

**Question 18 (c) (i)*****Sample answer:***

System bus – to transport data between devices on the motherboard

**Question 18 (c) (ii)*****Sample answer:***

Expansion slots – allows interface cards to be connected to motherboard

***Answers could include:***

Connection of graphics cards (PCIe), network cards (PCI), or AGP graphics

**Question 18 (c) (iii)*****Sample answer:***

Chipset – supports CPU, determines CPU processing speed

***Answers could include:***

Provides support for other onboard functions such as audio

**Question 18 (d)*****Sample answer:***

The advantages are that the upgrade makes the computer compatible with new hardware and software. It may also provide additional features.

The disadvantages are that the system could slow down because of increased CPU processing and/or the amount of RAM required. There may not be enough hard disk space to load the new operating system.

***Answers could include:***

- Drivers may not be available for existing hardware, which means that it would not operate on the upgraded operating system.
- The new operating system could be 64 bit and may not operate with the existing CPU.

**Question 19 (a)*****Sample answer:***

Real-time anti-virus scanning checks files as they are opened or saved while scheduled scanning only scans the computer at specific times.

**Question 19 (b)*****Sample answer:***

Only open emails from a trusted source. Make sure virus definitions are updated regularly.

***Answers could include:***

- Not sharing storage devices
- Limiting access to some sites on the internet
- Do not download from untrusted sources

**Question 19 (c)*****Sample answer:***

Anti-virus software can protect a computer from a number of viruses, however there are some circumstances where the anti-virus software may not protect the computer.

The computer may have outdated anti-virus definitions or the computer could be infected with a new virus which is not detected by the current definition.

***Answers could include:***

- The anti-virus software may be an older version.
- Install a file before scanning it.
- The settings of the anti-virus software may not be set to scan all files in real-time or not set up to scan at regular intervals.

## Section III

### Question 20

*Answers could include:*

- Level of access – login levels, read/write access, application security. Restrict software installation and changes to system by unauthorised users
- Admin user – to make changes to settings, create new user logins and assign permissions, install software and updates
- Backup procedure – reasons for backing up, types of backup, scheduling backups
- Customisation of desktop – determined by setting in operating system. Need for standard and individual settings based on user needs
- Software licensing – single user as it is only one machine
- File management – may include partitioning the hard disk to separate operating system and data.

## Section IV

### Question 21 (a)

***Sample answer:***

The tasks that should be carried out in regular scheduled hardware maintenance include:

- cleaning the keyboard with a brush or vacuum
- cleaning the monitor with a lint free cloth or specialised cleaning solution
- checking cables on all devices to ensure not loose or damaged
- checking and replacing consumables such as printer toner and ink.

### Question 21 (b)

***Sample answer:***

To clean the inside of a computer you would have to turn off and unplug it from the power point. Put on all personal protection equipment, mask and safety glasses. Next open the case and, using a suitable cleaning device such as a vacuum and anti-static brush, remove all dust. Replace case and screws. Test device is working.

***Answers could include:***

- use of compressed air to clean dust inside computer
- use of anti-static strap to prevent damage from static discharge

**Question 21 (c)*****Answers could include:***

<i>Date:</i>	To identify warranty details for new parts and the date work was carried out
<i>Job No:</i>	To show it was logged into a system – easier to track and retrieve at a later date
<i>Problem:</i>	To look for patterns in failure and send appropriate technician
<i>Time start &amp; end:</i>	Time spent on job for billing purposes
<i>Actions carried out:</i>	Shows the diagnostic testing the technician carried out to identify if fault could be found easily and corrected. This could help with technician training, identifying parts replaced for billing
<i>Follow-up work:</i>	To show good customer service
<i>Further Action:</i>	Additional work that may need to be done at a later date. This could support the work and/or advice carried out/given by the technician
<i>Technician:</i>	To identify who carried out the work, how productive they are. Makes it possible to refer back to them at a later date for specific information