2012 HSC Notes from the Marking Centre – Information Technology

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Introduction

This document has been produced for the teachers and candidates of the Stage 6 course in Information Technology. It contains comments on candidate responses to the 2012 Higher School Certificate examination, indicating the quality of the responses and highlighting their relative strengths and weaknesses.

This document should be read in conjunction with the relevant syllabus, the 2012 Higher School Certificate examination, the marking guidelines and other support documents developed by the Board of Studies to assist in the teaching and learning of Information Technology.

Teachers and candidates are reminded that if candidates are undertaking the 240-hour VET Industry Curriculum Framework in Information Technology and they want to undertake the HSC examination in Information Technology, they need to be entered separately for the examination through Schools Online (Administration) by the due date, which is published in the *Higher School Certificate Events Timetable*.

General comments

Teachers and candidates should be aware that examiners may ask questions that address the syllabus outcomes in a manner that requires candidates to respond by integrating their knowledge, understanding and skills developed through studying the course.

Candidates need to be aware that the mark allocated to the question and the answer space (where this is provided on the examination paper) are guides to the length of the required response. A longer response will not in itself lead to higher marks. Writing far beyond the indicated space may reduce the time available for answering other questions.

Candidates need to be familiar with the Board's <u>Glossary of Key Words</u>, which contains some terms commonly used in examination questions. However, candidates should also be aware that not all questions will start with or contain, one of the key words from the glossary. Questions such as 'how?', 'why?' or 'to what extent?' may be asked, or verbs that are not included in the glossary may be used, such as 'design', 'translate' or 'list'.

Section II

Question 16

- (a)(i) In better responses, candidates identified an example of each type of harassment.

 In weaker responses, candidates only gave an example for one type of harassment.
 - (ii) In better responses, candidates outlined two appropriate actions when dealing with workplace harassment.
 - In weaker responses, candidates only outlined one action or suggested inappropriate actions as a response to workplace harassment.
- (b) In better responses, candidates justified the inclusion of three items in a hardware audit.
 - In weaker responses, candidates listed hardware devices but did not include a justification.

Question 17

- (a)(i) In better responses, candidates identified the symbols and gave a justification for each precaution.
 - In weaker responses, candidates identified the appropriate symbol but did not provide justification for each precaution.
 - (ii) In better responses, candidates clearly outlined appropriate actions related to the incident.
 - In weaker responses, candidates identified an action but the action may have been inappropriate or not related to the incident.
- (b) In better responses, candidates clearly distinguished a cause-and-effect relationship between the setup of a workstation and the minimisation of workplace injuries. A variety of workplace injuries and their minimisation through the use of ergonomic equipment was described in detail.
 - In mid-range responses, candidates identified components of a workstation and showed some cause and effect in describing how the workstation could minimise workplace injury.
 - In weaker responses, candidates identified components of a workstation but were limited in describing how the workstation could minimise workplace injury.

Ouestion 18

- (a) In better responses, candidates clearly identified the cause of the error message and provided a coherent explanation of the correct method of avoiding it.
 - In weaker responses, candidates gave a coherent description of the correct process of removing a USB device but did not provide any advice as to how the identified error could have been avoided.
- (b) In many responses, candidates provided two valid factors to be considered when using a USB on two different operating systems.
- (c)(i) In better responses, candidates identified at least one purpose of the system bus.
 - (ii) In better responses, candidates included a valid purpose, with an example of the expansion slots.

- (iii) Few candidates provided a valid description of the purpose of the chipset. In better responses, candidates identified one specific function.
- (d) In the best responses to this question, candidates clearly identified two advantages and two disadvantages of upgrading the computer operating system.

Question 19

- (a) In most responses, candidates identified key features of the scanning methods provided.
 - In better responses, candidates clearly identified the difference between real-time and scheduled virus scanning.
- (b) In better responses, candidates provided two appropriate precautions to minimise virus infection.
 - In a number of the weaker responses, candidates provided precautions which directly related to the normal operation of virus protection software.
- (c) In better responses, candidates provided at least two ways an otherwise protected computer could be infected by a virus. In each case they were able to explain a clear effect of the cause identified.
 - In weaker responses, candidates identified one or more causes of infection without a suitable explanation of the effect.

Section III

Ouestion 20

In better responses, candidates provided significant detail of the steps involved in the installation of a new computer. In these responses, candidates then gave a cohesive and well-reasoned recommendation of the configuration requirements, demonstrating an in-depth understanding of the company's needs for security, data backup, file management and software licensing.

In mid-range responses, many candidates discussed security and data backup in the detail required, but did not address the other areas of the question.

In weaker responses, candidates addressed one or two of the areas mentioned in the question but did not include any recommendations for the installation process. These responses tended to be brief and lacked detail.

In some responses, candidates discussed the benefits of converting to a networked system as a solution to the situation described in the scenario. This, however, did not relate to the question.

In some other responses, candidates provided detailed recommendations about hardware specifications required rather than recommending the process of installing and configuring a replacement computer within the context of the scenario.

Section IV

Question 21

(a) Many candidates identified tasks that should be included in a regular hardware maintenance schedule.

In better responses, candidates described a range of hardware maintenance tasks relating to cleaning, testing functionality and consumable replacement by referring to the techniques, tools and reasons used in completing the task.

In mid-range responses, candidates identified tasks but only included limited techniques, tools or reasons, or used incorrect terminology or methodology when describing the tasks.

In weaker responses, candidates referred to software-related maintenance tasks such as running anti-virus or tasks associated with computer repairs rather than scheduled maintenance tasks.

(b) Most responses were in the format of a procedure.

In better responses, candidates described the processes and tools required to remove the computer from power to a safe workspace.

In mid-range responses, candidates described the tools and processes required for most steps, but did not include either the process required for safety or testing.

In weaker responses, candidates identified limited steps, but they disregarded the steps required for safety and testing and did not include required tools.

(c) In the best responses, candidates addressed the requirement of management's expectations by identifying a range of items that would need to be added to the maintenance card and explaining how the inclusion of each item would have improved the workplace efficiency. Generally in these responses, candidates included items from categories such as client contact details, hardware identification/location, error details, task status, solution, technician details and signoff.

In mid-range responses, candidates addressed a range of items that could be added to the card and explained the details that would be entered into the new area. However, only a basic explanation of how the new item would help meet management's expectations of workplace efficiency was provided.

In weaker responses, candidates either attempted to improve the comments already on the maintenance card or identified items that could be added to the maintenance card.