

**2003 HSC Notes from
the Marking Centre
Information Technology VET**

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2003 HSC NOTES FROM THE MARKING CENTRE

INFORMATION TECHNOLOGY VET

Introduction

This document has been produced for the teachers and candidates of the Stage 6 course in Information Technology VET. It comments on candidate responses to the 2003 Higher School Certificate Examination, indicates the quality of candidate responses and highlights the relative strengths and weaknesses of the responses in each question and each section.

It is essential for this document to be read in conjunction with the relevant syllabus, the 2003 Higher School Certificate Examination, the Marking Guidelines and support documents which have been developed by the Board of Studies to assist in the teaching and learning of Information Technology.

General Comments

In 2003, 4369 candidates attempted the Information Technology examination. This is the third year this subject has been examined and the candidature has increased by approximately 30%.

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. This reflects the fact that the knowledge, understanding and skills developed through the study of discrete sections, should accumulate to a more comprehensive understanding than may be described in each section separately.

Section I

Multiple choice

Question	Correct Response
1	A
2	B
3	D
4	C
5	A
6	A
7	C
8	B

Question	Correct Response
9	C
10	C
11	B
12	D
13	D
14	B
15	D

Section II

Question 16

- (a) In general, this part of the question was poorly answered. The question required STEPS to be outlined in sequence whereas the majority of candidates described part(s) of the process. Higher order responses addressed the efficient incorporation of data by including the checking of field names corresponding to spreadsheet columns. Lower order responses listed copy and paste as an answer. A significant number of candidates did not make reference to the database or spreadsheet in their answer. Many candidates referred to the database as a spreadsheet.
- (b) (i) Many candidates interpreted this question incorrectly and provided a simple definition of a field rather than identify the characteristics of a field. Many candidates confused ‘records’ and ‘fields’. Some candidates described one characteristic rather than listing two.
- (ii) Most candidates answered this question correctly; however, some candidates misread this question and explained how to show the picture rather than identify ways to find assistance.
- (c) Those candidates who had knowledge of SQL performed well on this question, though many candidates had little or no understanding of SQL.
- (d) (i) Overall this part was well attempted by candidates. Some candidates failed to identify the manager’s name as the data required to personally address the letter. Some candidates mistakenly identified the process (mail merge) as the additional data needed.
- (ii) Most candidates could identify the mail merge process. Higher order responses provided a comprehensive itemised list with supporting diagrams. For some candidates difficulties arose when listing steps in the correct sequence and/or describing necessary steps to complete the mail merge process.

Question 17

- (a) (i) & (ii) In general candidates answered this question well. Some candidates made obvious mistakes by not reading the entire question. It is important that candidates read all parts of questions fully.
- (b) The majority of candidates received at least one mark for this question by describing the OHS issue while neglecting to actually identify the issue in their answer.
- (c) A significant number of candidates struggled with this question. Many candidates did not understand the function of a device driver. An IT candidate responsible for connecting peripheral devices should understand the importance of device drivers.
- (d) Candidates generally understood the term ‘inventory’ but in many cases, could not distinguish between an ‘inventory’ and ‘centralised storage’. The question asked for more than one benefit. Many candidates only gave one benefit and therefore did not score full marks.

Question 18

(a)(i) & (ii) and (b)(i) & (ii)

There was a good response when identifying which format was more applicable to which graphic. Most candidates identified JPEG for *Graphic 1*, and GIF or PNG for *Graphic 2*. However, many candidates failed to provide two reasons for their choice of format. Most candidates fell into the 3–4 mark range.

It was evident that many candidates were not able to express their answer in technical terms. Answers frequently included ‘takes up less space’ rather than ‘good compression ratio leading to smaller file size’ and ‘easy to send’ instead of ‘reduced download time and/or cost’. There was a general failure to recognise the file formats as ‘web standards’; some candidates writing ‘good for the web’ or ‘common file format’.

Minimal loss of quality was frequently mentioned but was not recognised as being applicable when resizing; in particular, JPEG, for the colour photograph, and as not being an issue with GIF, for the line drawing.

A number of candidates did not consider the context of the question and, in particular, did not realise that there were only three possible formats to choose from.

Question 19

(a) The majority of candidates were able to identify a particular issue related to an aspect of system requirements, such as, CPU speed, operating system version, data conversion, in-between software versions missing. A disappointing number of candidates simply cited for example ‘system requirements’ or ‘hardware requirements’. Training issues were identified as the next most popular answer while only a few candidates identified licensing issues.

(b) Generally, candidates correctly identified either CPU speed 200 MHz or Operating System Version 2 as not meeting the system requirements for Version 10.

(c) (i) & (ii)

The most common predictions were:

- the software would run slowly due to the lower (200 MHz) CPU speed
- the software would either not install, or, not all functions would work because of the older Version 2 Operating System.

A number of candidates predicted that it would run ‘OK’ (or similar wording) as the RAM and HD size were higher than recommended, often remarking that the difference in CPU speed and Operating system were negligible.

Too many candidates failed to appreciate that the question asked how the software would run, and so answered in terms of how the hardware would perform.

‘Predict’ is a keyword in the Board of Studies key word glossary and yet many candidates did not appear to understand the meaning of this term. Frequently the explanation provided was mistakenly presented as the prediction.

Section III – Options

Candidates were required to attempt two of the following questions:

Question 20

This question was attempted by approximately 33% of candidates.

Unlike the other two options, the question did not contain stimulus material. The question consisted of three parts: draw and design a template, explain the template features and analyse the use of templates.

Candidates who scored in the higher mark ranges demonstrated a clear understanding of templates and their use in organisations. Their template designs were clearly laid out and contained many features. The explanation of the features covered most, if not all, of the features included in their design. Candidates made it clear why they had included the features in their design. The analysis part of the question identified the impacts AND the implications for the organisations, unlike responses in the lower mark ranges.

Mid-range responses usually did not address all parts of the question and/or lacked detail. A common response in this range contained a good template design and then failed to cover the explanation and analysis in sufficient detail. Candidates in this range had a good understanding of templates but did not express themselves adequately.

Low-range responses failed to address most parts of the question; often a template design was drawn with no explanation or analysis. A common error among candidates in this range was to describe the features rather than analyse them. If an analysis was attempted it was only in terms of impact.

Candidates need to focus on the following specific areas to improve responses to this type of question:

- develop an understanding of the BOS Glossary of Key Words (including analyse and explain)
- practice extended response writing skills
- apply knowledge and understanding to the scenario given in the question.

Question 21

This question was attempted by approximately 33% of candidates.

This question was generally answered poorly.

Candidates generally did not analyse or assess when answering this question.

Candidates need to fully understand common formats such as report, memo, email, business letter and the main features of each.

Candidates attempting this question did not indicate familiarity with backup procedures, the rationale behind backups, why files get lost/damaged and why backing up is a centralised function. Candidates raised the issue of using a replacement media for backup, eg CD, removable hard drive or RAID, which shows a misunderstanding of backup media. This restricted their analysis in answering the question.

Many candidates simply rewrote the question with a memo format, while others did not pick up on the fact that there were a lot of good points in the backup policy and only concentrated on the improvements required. Other candidates identified good points but did not comment on improvements.

A significant number of candidates made reference to the additional information and completed basic level calculations to support written accounts

Only a small percentage of candidates structured their responses to consider both short- and long-term implementation issues.

Better responses demonstrated an organised and logical structure and a sound level of understanding of IT functions which included reference to the scenario.

Candidates need to focus on the following specific areas to improve responses to this type of question:

- develop an understanding of the BOS Glossary of Key Words (including analyse and explain)
- practice extended response writing skills
- apply knowledge and understanding to the scenario given in the question.

Question 22

This question was attempted by approximately 33% of candidates.

This question focused on assessing the following units:

- Apply Occupational Health and Safety Procedures
- Operate Computer Hardware
- Work Effectively in an IT environment
- Communicate in the Workplace.

Candidates who achieved high marks were able to:

- write a report format that was well structured, cohesive and appropriate to the audience
- demonstrate, through the diagram, an understanding of workplace organisation
- select appropriate hardware and write specifications. An example of a good response for a computer included IT terminology such as ‘Pentium 4 2.8GHz, 1 GB RAM, 80 GB hard drive’. In addition, specifications for a range of peripheral devices were provided
- apply OHS principles to the given office layout by fixing existing faults in the layout. An example of a good response included ‘store the boxes of consumables in a cupboard so that workers do not trip over the boxes’
- follow OHS principles when adding equipment to the layout for the graphic artists. For example, the placement of the new workstations to avoid glare on the monitors from natural light
- indicate reasons for the decisions made in relation to the scenario.

Candidates who scored mid-range marks :

- provided limited report structure, which often lacked an introduction or awareness of the intended audience
- identified problems with the existing office layout but often created new problems in their solutions. For example, moving the photocopier away from the sink to avoid water spillage and placing it close to a doorway
- identified hardware required in general terms such as ‘buy a computer with a fast processor and large memory’
- fixed existing faults and/or add equipment to the layout but not explain the OHS reasons for their actions. ‘Stacking boxes neatly’ does not adequately explain an OHS issue
- identified some issues with limited reasons for their decisions.

Candidates who scored low marks wrote vague responses that were incomplete and did not give reasons for any decisions made. These candidates:

- drew incomplete diagrams, often omitting the new workstations for the graphic artists
- listed a few hardware specifications or identified existing OHS issues in the office. For example, for specifications, ‘buy a high quality computer’, and for an OHS issue, ‘move the cables’.

To improve responses, candidates need to:

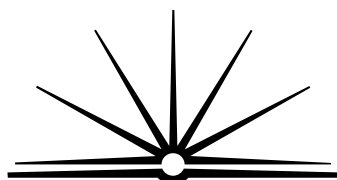
- have knowledge of current hardware specifications and be able to select the most appropriate hardware to suit a particular scenario
- address all areas of the question
- give reasons to support any decisions made
- practice report writing skills
- develop interpretation/extraction skills for stimulus material
- develop an understanding of the Board of Studies Glossary of Key Words.

Information Technology

2003 HSC Examination Mapping Grid

Question	Marks	Unit of competency
1	1	ICAITS015B
2	1	ICAITU007B
3	1	ICAITS017B
4	1	ICAITU013B
5	1	ICAITU013B
6	1	ICAITS014B
7	1	ICAITU004B
8	1	ICAITU006B
9	1	ICAITU006B, ICAITU012B
10	1	ICAITU006B, ICAITU012B
11	1	ICAITU006B
12	1	ICAITU006B
13	1	ICAITU006B
14	1	ICAITU006B
15	1	ICAITU006B
16 (a)	3	ICAITU013B
16 (b) (i)	2	ICAITU006B
16 (b) (ii)	2	ICAITU006B
16 (c)	3	ICAITU006B
16 (d) (i)	1	ICAITU013B
16 (d) (ii)	3	ICAITU013B
17 (a) (i)	1	ICAITS014B, ICAITU013B, ICAITU007B
17 (a) (ii)	1	ICAITS014B, ICAITU013B, ICAITU007B
17 (b)	2	ICAITS014B

Question	Marks	Unit of competency
17 (c)	1	ICAITS014B
17 (d) (i)	2	ICAITU007B
17 (d) (ii)	2	ICAITU007B
18 (a) (i)	1	ICAITU013B, ICAITU006B
18 (a) (ii)	2	ICAITU013B, ICAITU006B
18 (b) (i)	1	ICAITU013B, ICAITU006B
18 (b) (ii)	2	ICAITU013B, ICAITU006B
19 (a)	1	ICAITS015B
19 (b)	1	ICAITS015B
19 (c) (i)	2	ICAITS015B
19 (c) (ii)	2	ICAITS015B
20	15	ICAITU012B, ICAITW001B, ICAITW002B
21	15	ICAITS017B, ICAITW001B, ICAITW002B
22	15	ICAITU005B, ICAITU004B, ICAITW001B, ICAITW002B



B O A R D O F S T U D I E S
NEW SOUTH WALES

2003 HSC Information Technology Marking Guidelines

Question 16 (a)

Competencies assessed: ICAITU013B

MARKING GUIDELINES

Criteria	Marks
• Outlines four or more steps in correct sequence	3
• Outlines three steps listed in correct sequence	2
• At least three steps listed not in correct sequence OR • The use of import term, import spreadsheet to database OR export spreadsheet to database OR any reference to open, save, close	1

Question 16 (b) (i)

Competencies assessed: ICAITU006B

MARKING GUIDELINES

Criteria	Marks
• Names two or more appropriate characteristics	2
• Names one appropriate characteristic	1

**Question 16 (b) (ii)***Competencies assessed: ICAITU006B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Names two correct ways of finding out how to show a picture	2
<ul style="list-style-type: none">Names one correct way of finding out how to show a picture	1

Question 16 (c)*Competencies assessed: ICAITU006B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Both search requirements correct and logical operator correct AND <ul style="list-style-type: none">All of the correct fields selected AND <ul style="list-style-type: none">Proper SQL syntax (SELECT, FROM, WHERE)	3
<ul style="list-style-type: none">Identifies both search specifications in WHERE statement AND <ul style="list-style-type: none">Either SELECT or FROM statement correct	2
<ul style="list-style-type: none">Identify 1 of the 2 search specifications in WHERE statement OR <ul style="list-style-type: none">SELECT line correct OR <ul style="list-style-type: none">FROM line correct OR <ul style="list-style-type: none">SELECT, FROM, WHERE in correct sequence	1

Question 16 (d) (i)*Competencies assessed: ICAITU013B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Anything that refers to a name, contact name, manager name	1

Question 16 (d) (ii)*Competencies assessed: ICAITU013B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">• Correct steps in sequence<ul style="list-style-type: none">– 1 open or create document– 2 Insert fields from database into appropriate places in letter– 3 Merge letter and data to file or printer AND <ul style="list-style-type: none">• Including term mail merge	3
<ul style="list-style-type: none">• Mail merge identified AND three steps not sequenced OR <ul style="list-style-type: none">• Mail merge identified AND two steps in sequence OR <ul style="list-style-type: none">• Three steps in sequence	2
<ul style="list-style-type: none">• If mail merge is mentioned OR two steps in sequence	1

Question 17 (a) (i)*Competencies assessed: ICAITS014B, ICAITU013B, ICAITU007B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">• Operating system troubleshooting guide	1

Question 17 (a) (ii)*Competencies assessed: ICAITS014B, ICAITU013B, ICAITU007B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">• Printer driver needed to be updated, installed, enabled	1

Question 17 (b)*Competencies assessed: ICAITS014B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">• Names and describes one issue	2
<ul style="list-style-type: none">• Names or describes one issue	1

Question 17 (c)*Competencies assessed: ICAITS014B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Clearly outlines interaction between driver software, operating system and peripheral device or hardware	1

Question 17 (d) (i)*Competencies assessed: ICAITU007B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Describes two appropriate organisational benefits	2
<ul style="list-style-type: none">Describes one appropriate organisational benefit	1

Question 17 (d) (ii)*Competencies assessed: ICAITU007B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Describes two appropriate organisational benefits	2
<ul style="list-style-type: none">Describes one appropriate organisational benefit	1

Question 18 (a) (i)*Competencies assessed: ICAITU013B, ICAITU006B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Identifies correct format	1

Question 18 (a) (ii)*Competencies assessed: ICAITU013B, ICAITU006B***MARKING GUIDELINES**

Criteria	Marks
<ul style="list-style-type: none">Identified two or more distinct reasons for the format selected from the three available	2
<ul style="list-style-type: none">Identified one reason for the format selected from the three available	1

**Question 18 (b) (i)***Competencies assessed: ICAITU013B, ICAITU006B***MARKING GUIDELINES**

Criteria	Marks
• Identifies correct format	1

Question 18 (b) (ii)*Competencies assessed: ICAITU013B, ICAITU006B***MARKING GUIDELINES**

Criteria	Marks
• Identified two or more reasons	2
• Identified one reason	1

Question 19 (a)*Competencies assessed: ICAITS015B***MARKING GUIDELINES**

Criteria	Marks
• Identified one correct issue	1

Question 19 (b)*Competencies assessed: ICAITS015B***MARKING GUIDELINES**

Criteria	Marks
• Outlines one correct item	1

Question 19 (c)*Competencies assessed: ICAITS015B***MARKING GUIDELINES**

Criteria	Marks
• Two accurate predictions with matching explanations	4
• Two accurate predictions, one with matching explanation	3
• One accurate prediction with matching explanation	2
• One or two accurate prediction(s) with no explanation	1

Question 20
Competencies assessed: ICAITU012B, ICAITW001B, ICAITW002B
MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Addresses all components of the question as detailed below • Provides a cohesive, well reasoned response that reflects a high level of organisation, judgement, synthesise and problem solving skills • Demonstrates an in depth understanding of IT functions with reference to the scenario used in the question • Consistently uses precise IT terminology to a professional level • Communicates in the manner required by the question consistently using standard industry formats 	13–15
<ul style="list-style-type: none"> • Addresses all components of the question as detailed below • Provides a cohesive, well reasoned response showing significant organisational and problem solving skills • Demonstrates a detailed understanding of IT functions with reference to the scenario used in the question • Uses precise IT terminology to a level acceptable in industry • Communicates in the manner required by the question using standard industry formats 	10–12
<ul style="list-style-type: none"> • Addresses some components of the question as detailed below • Provides a response displaying some organisational and problem solving skills • Demonstrates a basic understanding of IT functions with limited reference to the scenario used in the question • Uses basic IT terminology • Communicates in the manner required by the question using some elements of industry format 	7–9
<ul style="list-style-type: none"> • Addresses some components of the question as detailed below • Provides a response displaying limited organisation and problem solving skills • Demonstrates a limited understanding of IT functions • Uses limited IT terminology • Communicates in the manner required by the question using few elements of industry format 	4–6
<ul style="list-style-type: none"> • Addresses minimal components of the question as detailed below • Provides a response displaying little organisation and problem solving skill • Demonstrates a very limited understanding of IT functions • Uses some IT terminology • Does not communicate in the manner required by the question and does not use industry formats 	1–3

Question 21
Competencies assessed: ICAITS017B, ICAITW001B, ICAITW002B
MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Addresses all components of the question as detailed below • Provides a cohesive, well reasoned response that reflects a high level of organisation, judgement, synthesise and problem solving skills • Demonstrates an in depth understanding of IT functions with reference to the scenario used in the question • Consistently uses precise IT terminology to a professional level • Communicates in the manner required by the question consistently using standard industry formats 	13–15
<ul style="list-style-type: none"> • Addresses all components of the question as detailed below • Provides a cohesive, well reasoned response showing significant organisational and problem solving skills • Demonstrates a detailed understanding of IT functions with reference to the scenario used in the question • Uses precise IT terminology to a level acceptable in industry • Communicates in the manner required by the question using standard industry formats 	10–12
<ul style="list-style-type: none"> • Addresses some components of the question as detailed below • Provides a response displaying some organisational and problem solving skills • Demonstrates a basic understanding of IT functions with limited reference to the scenario used in the question • Uses basic IT terminology • Communicates in the manner required by the question using some elements of industry format 	7–9
<ul style="list-style-type: none"> • Addresses minimal components of the question as detailed below • Provides a response displaying limited organisation and problem solving skills • Demonstrates a limited understanding of IT functions • Uses some IT terminology • Communicates in the manner required by the question using few elements of industry format 	1–6

Question 22
Competencies assessed: ICAITU005B, ICAITU004B, ICAITW001B, ICAITW002B
MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Addresses all components of the question as detailed below • Provides a cohesive, well reasoned response that reflects a high level of organisation, judgement, synthesise and problem solving skills • Demonstrates an in depth understanding of IT functions with reference to the scenario used in the question • Consistently uses precise IT terminology to a professional level • Communicates in the manner required by the question consistently using standard industry formats 	13–15
<ul style="list-style-type: none"> • Addresses all components of the question as detailed below • Provides a cohesive, well reasoned response showing significant organisational and problem solving skills • Demonstrates a detailed understanding of IT functions with reference to the scenario used in the question • Uses precise IT terminology to a level acceptable in industry • Communicates in the manner required by the question using standard industry formats 	10–12
<ul style="list-style-type: none"> • Addresses some components of the question as detailed below • Provides a response displaying some organisational and problem solving skills • Demonstrates a basic understanding of IT functions with limited reference to the scenario used in the question • Uses basic IT terminology • Communicates in the manner required by the question using some elements of industry format 	7–9
<ul style="list-style-type: none"> • Addresses some components of the question as detailed below • Provides a response displaying limited organisation and problem solving skills • Demonstrates a limited understanding of IT functions • Uses limited IT terminology • Communicates in the manner required by the question using few elements of industry format 	4–6
<ul style="list-style-type: none"> • Addresses minimal components of the question as detailed below • Provides a response displaying little organisation and problem solving skill • Demonstrates a very limited understanding of IT functions • Uses some IT terminology • Does not communicate in the manner required by the question and does not use industry format 	1–3