



Victorian Certificate of Education 2011

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER

Figures

Words

Letter

--

VCE VET INFORMATION TECHNOLOGY

Written examination

Wednesday 16 November 2011

Reading time: 9.00 am to 9.15 am (15 minutes)

Writing time: 9.15 am to 10.45 am (1 hour 30 minutes)

QUESTION AND ANSWER BOOK

Structure of book

<i>Section</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	20	20	20
B	24	24	70
			Total 90

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.
- No calculator is allowed in this examination.

Materials supplied

- Question and answer book of 21 pages.
- Answer sheet for multiple-choice questions.

Instructions

- Write your **student number** in the space provided above on this page.
- Check that your **name** and **student number** as printed on your answer sheet for multiple-choice questions are correct, **and** sign your name in the space provided to verify this.
- All written responses must be in English.

At the end of the examination

- Place the answer sheet for multiple-choice questions inside the front cover of this book.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

SECTION A – Multiple-choice questions**Instructions for Section A**

Answer **all** questions in pencil on the answer sheet provided for multiple-choice questions.

Choose the response that is **correct** or that **best answers** the question.

A correct answer scores 1, an incorrect answer scores 0.

Marks will **not** be deducted for incorrect answers.

No marks will be given if more than one answer is completed for any question.

Question 1

An 'intermediate user' of an application is one who

- A. is able to complete repetitive tasks.
- B. has had limited experience with similar applications.
- C. uses advanced functions in complex situations.
- D. is familiar with major functions in the application.

Question 2

Thomas is having difficulty recording a macro in a word processing document.

This issue is a

- A. network problem.
- B. software problem.
- C. hardware problem.
- D. virus infection problem.

Question 3

Megan is the Occupational Health and Safety (OH&S) officer for her workplace, where she is responsible for assessing the potential for harm or injury. Megan needs to complete an audit of her workplace.

Her starting point is to identify

- A. the complete list of workers.
- B. the hazards in the workplace.
- C. the emergency evacuation procedures.
- D. the exits leading to the outside of the workplace.

Question 4

Lauren is a university accounting student. She wants to buy a computer system to use at home to complete course assignments. Lauren, who has a limited budget, is considering four computer systems.

Which is the most appropriate computer for Lauren's needs?

	A.	B.	C.	D.
Type	laptop	desktop	desktop	tower
Processor	i7 720QM quad	i7 860	240 dual 2.8 GHz	i3 530
RAM	2 GB	6 GB	2 GB	4 GB
Hard drive	500 GB	1.5 TB	320 GB	1 TB
Video card	1 GB	1.8 GB	512 MB	1 GB
DVD drive	DVD±RW	DVD±RW	DVD±RW	DVD±RW
LCD screen	16-inch VGA	26-inch HD	22-inch HD	24-inch HD
Other	webcam	TV card	1 TB external hard disk	multi-device card reader
Cost	\$1000	\$1300	\$1000	\$1200

Question 5

When upgrading a computer's operating system, it is most important to make sure

- A. there are no viruses, malware or spyware on the current system.
- B. the client has the latest software, designed for the operating system.
- C. the proposed operating system is compatible with the existing hardware.
- D. the operating system will be updated at least once a year to keep up to date.

Question 6

Anti-virus software

- A. reports a virus to the Help Desk.
- B. documents symptoms discovered.
- C. detects a virus using its signature.
- D. anticipates new viruses, based on email activity.





Question 7

Virtual memory is the

- A. physical memory.
- B. code pages of loaded programs.
- C. sum of physical memory and ROM.
- D. sum of physical memory and the page file.

Question 8

Which column correctly describes the symbols at the left?

	A.	B.	C.	D.
	power	microphone	speaker socket	WiFi
	USB	firewire	USB	LAN
	WiFi	WiFi	microphone	stereo output
	low battery	firewall	no mains power	low battery

Question 9

Defragmenting a hard drive

- A. uses up more space on the hard disk.
- B. speeds up the hard drive’s read access.
- C. slows down the hard drive’s read/write heads.
- D. increases the amount of fragmentation in the file system.

Question 10

What is the best order of actions for a Help Desk to take with a new problem?

- A. identify the client, identify the problem and solve or provide a solution timeline
- B. identify the client, escalate the problem and solve or provide a solution timeline
- C. identify the problem, escalate the problem and solve or provide a solution timeline
- D. identify the problem, solve or provide a solution timeline and escalate the problem

Question 11

Maya has returned her laptop from hibernation mode and is trying to use her browser. The message ‘Browser is currently not online and cannot browse the Web’ appears for every website she tries to access.

You advise Maya to

- A. wait until the ISP services are restored.
- B. uncheck the ‘work offline’ option in the browser.
- C. check that the ADSL modem is activated and online.
- D. check that the network cable is plugged into the laptop.

Question 12

Jason rings the Help Desk to complain that he cannot connect to the Internet. Marina, the Help Desk operator, attempts to use a search engine with no response from the search site.

Which is the most appropriate sequence of actions for Marina to take?

- | | |
|--|--|
| A.
hang up the phone
reset the Internet connection
email Jason with a solution | B.
wait on the phone
email Jason with a solution
reset the Internet connection |
| C.
hang up the phone
email Jason with a solution
reset the Internet connection | D.
wait on the phone
reset the Internet connection
email Jason with a solution |

Question 13

An employer wants to make sure that employees cannot share viruses on their networked computers. All computers on the network automatically power down at midnight.

How can this best be achieved?

- A. allow users to update virus definitions manually
- B. update the firmware on the firewall to prevent intrusions
- C. set the virus definition update to run at 2 am every Saturday
- D. set the virus definition update to run when the computer powers up

Question 14

For best practice, a workplace reissues OH&S documentation to employees

- A. after regular three-monthly OH&S reviews.
- B. weekly, with the internal company newsletter.
- C. yearly, as part of the company's annual report.
- D. after a significant OH&S accident at the workplace.

Question 15

The user accounts at a business employing 20 people are changing logins from *firstname* to *firstname.lastname*.

The best way to communicate these changes is to

- A. have an immediate staff meeting.
- B. email all the users, using the new login.
- C. have a Help Desk technician visit each user.
- D. put an information sheet on the business's notice boards.

Question 16

Thanh has problems recording a spreadsheet macro for some urgently needed, repetitive formatting tasks. Jerry is a junior Help Desk operator and cannot help Thanh resolve the problem.

How can Jerry best help Thanh?

- A. arrange an off-site training course for Thanh
- B. give Thanh access to a library of existing macros
- C. send Thanh hard-copy macro-writing documentation
- D. pass the problem to a more experienced Help Desk operator

Question 17

A heavily used photocopier is close to an office work area. After a few months, some employees working near the photocopier report health problems.

This type of OH&S hazard is

- A. electrical.
- B. chemical.
- C. mechanical.
- D. psychological.

Question 18

A good virus checker has the ability to detect ‘viruses in the wild’.

To do this, the process that the virus software follows is

- A. locate all the virus definitions available.
- B. analyse each piece of software and create a risk report.
- C. monitor software for inappropriate activity and seek user confirmation of actions.
- D. monitor the virus definitions for virus activity that becomes wild and uncontrollable.

Question 19

Select the column that indicates the best document style for a 200-page printed manual.

	A.	B.	C.	D.
Main Heading	serif font 14 point bold	serif font 16 point bold	sans-serif font 14 point bold	sans-serif font 16 point bold
Subheadings	serif font 13 point bold	sans-serif font 12 point bold	serif font 12 point bold	sans-serif font 14 point bold
First paragraph after heading	sans-serif font 11 point drop cap first line indented 0.5 cm	serif font 9 point no drop cap first line indented 0.5 cm	serif font 11 point no drop cap first line flush left	sans-serif font 9 point drop cap first line flush left
Body paragraphs	sans-serif font 11 point no spacing between paragraphs first line flush left	serif font 9 point 6 point spacing before and after paragraphs first line indented 0.5 cm	serif font 11 point no spacing between paragraphs first line indented 0.5 cm	sans-serif font 9 point 6 point spacing before and after paragraphs first line flush left
Dot points (bullets)	use • as symbol not indented	use ■ as symbol indented 0.5 cm	use ➤ as symbol indented 0.5 cm	use ✱ as symbol not indented
Column width	17 cm (one column on A4 page)	8 cm (two columns on A4 page)	8 cm (two columns on A4 page)	5 cm (three columns on A4 page)

Question 20

Albert is a document writer, creating user documentation for a bank's new online banking website. In order, the tasks that Albert will perform are

- A.**
- review the online banking system
 - gather the online banking system specifications
 - create a user manual based on an HTML template
 - submit the online banking user manual for feedback
 - make changes to the online banking user manual
 - submit the final online banking user manual for approval
- B.**
- create a user manual based on an HTML template
 - make changes to the online banking user manual
 - submit the online banking user manual for feedback
 - gather the online banking system specifications
 - submit the final online banking user manual for approval
 - review the online banking system
- C.**
- create a user manual based on an HTML template
 - gather the online banking system specifications
 - make changes to the online banking user manual
 - review the online banking system
 - submit the online banking user manual for feedback
 - submit the final online banking user manual for approval
- D.**
- review the online banking system
 - create a user manual based on an HTML template
 - gather the online banking system specifications
 - make changes to the online banking user manual
 - submit the online banking user manual for feedback
 - submit the final online banking user manual for approval

SECTION B – Short answer questions**Instructions for Section B**

Answer **all** questions in the spaces provided.

Question 1

List three methods used to contact a Help Desk.

1. _____
2. _____
3. _____

3 marks

Question 2

Cameron has finished typing a report on his computer. When he attempts to print it, the printer does not respond. The printer is on, there is paper in the paper tray, and there does not appear to be a paper jam as the printer's display window is blank.

What is the most likely cause of his problem?

1 mark

Question 3

Amy is using a system diagnostic tool on her computer. The tool returns the information below.

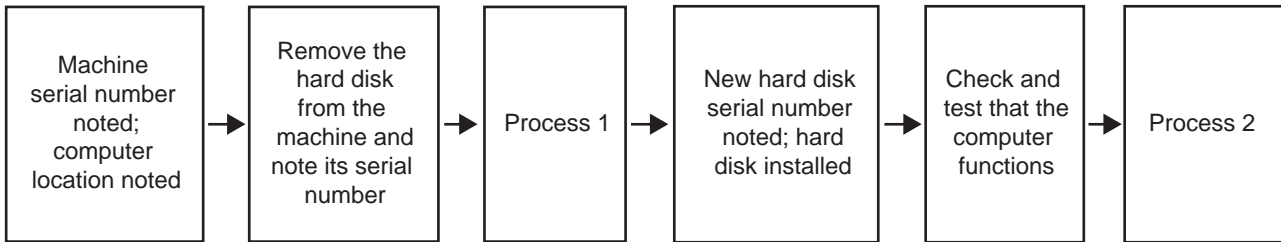
Tick (✓) the boxes of the four most important things Amy needs to help her decide whether her computer can run a new publishing application.

- number of temporary files
- manufacturer
- BIOS ROM date
- total RAM
- benchmark speed
- free disk space
- VDU resolution
- percentage defragmentation
- CPU percentage usage

4 marks

Question 4

Joshua was repairing a client’s computer and found that the hard disk was faulty and needed to be replaced. The diagram below shows the steps that Joshua followed when replacing the hard disk.



Tick (✓) one box that best describes Process 1 and one box that best describes Process 2.

Process 1	Process 2
<input type="checkbox"/> Identify the cause of the problem and discuss with client <input type="checkbox"/> Replacement hard disk sourced; notify install date and cost to client <input type="checkbox"/> Note and save BIOS settings <input type="checkbox"/> Back up and verify hard disk before removal	<input type="checkbox"/> Leave user documentation with the client for training <input type="checkbox"/> Client completes an evaluation sheet on your work and signs off on repair <input type="checkbox"/> Run full virus scan on hard disk <input type="checkbox"/> Restore backup information to the hard disk

2 marks

Question 5

Your business installed several new networked computers. Your tasks were to

- install the hardware required
- install the software required
- create a star network with a switch hub
- provide an Internet connection for the computers on the network.

It is six months since the installation was completed and it is time to do an evaluation.

List and explain two ways to evaluate the work you completed.

1. _____

2. _____

2 marks

Question 6

Des purchased the components for a computer and built the computer himself. He had a choice of two popular operating systems. One was described as Open Source and the other was described as Commercial.

- a. Other than cost, identify one advantage of an Open Source operating system and explain this advantage.

Advantage	Explanation

2 marks

- b. Identify two advantages of a Commercial operating system and explain these advantages.

Advantage	Explanation

4 marks

Question 7

Lina is an employee at a local computer printing business. She was injured when she opened the top drawer of a four-drawer filing cabinet and the cabinet tipped over.

Briefly describe two file storage or filing cabinet maintenance procedures that could have helped prevent this accident.

2 marks

Question 8

A company is deploying laptops to all its staff. All staff will be asked to follow a set of guidelines that will allow them to share files. The guidelines include the following.

- Employees can share files between company-owned computers only.
- All software installed on company computers must be approved by the Information Services Department.

Explain three issues that the company is addressing, using these guidelines.

1. _____

2. _____

3. _____

3 marks

Question 9

The Help Desk operator for a large company received the following three support calls in quick succession.

Prioritise the calls by placing the numbers 1, 2 and 3 in the boxes with 1 being the most important.

The Company Chairperson's assistant wishes to purchase a personal gift and cannot access the Internet to make her purchase.

The Board of Directors needs a video conferencing link in two hours to discuss an issue with a sales representative in Asia.

The Administration Manager needs a toner cartridge installed in one of the marketing department's two laser printers.

2 marks

Question 10

Which is the most appropriate approach to use when first documenting a new user system?

Tick (✓) your choice **and** justify it.

Save time and money by using another organisation's documentation of a similar product as a template for your document

Review the system, decide on the broad content and design a style that suits it

Use your existing documentation standards and write the documentation to fit them

1 mark

Question 11

Made-To-Order Designs decided to create web-based documentation for its online order system.

The web page style guide includes the following.

- The business logo is in the top left-hand corner of the page.
 - Each page has the words ‘Copyright Made-To-Order Designs 2011’.
 - Navigation buttons are laid out horizontally next to the logo.
 - Headings are Arial font, size 24.
 - Other text is Arial font, size 12.
 - Each screen dump has a caption.
- a. Based on the style guide, draw an appropriate outline template design for the business to use for all its user documentation web pages.

2 marks

- b. The table below lists two style guidelines. Suggest one reason why Made-To-Order Designs uses each guideline.

Style guideline	Reason
Navigation buttons are laid out horizontally next to the logo.	
Each screen dump has a caption.	

2 marks

Question 12

Clive has a problem with his desktop. He receives an electric shock when he touches a component inside the computer. Steve sees the incident.

- a. After turning off the power, what should be Steve's first action?

1 mark

- b. To whom will Steve report the incident?

1 mark

- c. Why will Steve be asked to fill in an incident report?

1 mark

Question 13

Theo uses his computer to create and edit video clips. The computer's disk configuration includes the following.

Device	Specification	Notes
CPU	3.2 GHz quad core	
RAM	1 GB	
1st disk drive	80 GB IDE/PATA (5400 rpm, 2 MB buffer)	Boot drive, containing all operating system and application software files
2nd disk drive	1 TB SATA (7200 rpm, 16 MB cache)	Data drive, used for all video clips, and application data files
3rd disk drive	1 TB SATA (7200 rpm, 16 MB cache)	Data drive, only used for temporary storage of completed projects (not used during editing)

While he edits his video clips, Theo also uses

- a graphics viewer to view and select still images
- a graphics editing program to create or modify still images
- a music player to select background music
- several word processing files to document his progress
- several spreadsheets to record details of the clips, files, music and images used
- a sound editing program to edit background music.

Theo's system sometimes runs slowly.

Describe one change he can make to the operating system setup to improve system performance. Justify your answer.

2 marks

Question 14

Customers complained to AppsRus Help Desk about the time taken to resolve their issues. Your tasks are to investigate and improve the processing of customer problems. You begin by looking at the form, shown below, that the Help Desk uses to log the information received.

AppsRus					
Date problem logged		Issue that needs to be resolved			
Client name		Technician assigned		Date completed	

a. List two things to add to the form to improve the processing of jobs.

1. _____

2. _____

2 marks

b. **Redesign** the form, and add these two improvements.

AppsRus					

1 mark

Question 15

From the list below, tick (✓) three boxes indicating the most important requirements that industries commonly use when developing user documentation.

- use of colour
- number of pages
- clarity and readability
- only copyright material used
- identification of target audience
- specification model of printer used
- appropriate content, format and style

3 marks

Question 16

Jelena is the Occupational Health and Safety (OH&S) officer at her organisation. Surjeet complains that his back is cold in summer and warm in winter, but his head is always comfortable. Jelena checks Surjeet's workstation and finds it complies with the organisation's OH&S policies.

What should Jelena do next?

2 marks

Question 17

The diagram shows a user at a workstation.



Listed below are some good OH&S features displayed in the diagram.

- the chair has a dynamic back rest
- feet are flat on the floor
- wrists are flat and straight in relation to forearms
- the top of the monitor is at or below eye level
- the work surface is stable

List three additional good OH&S features displayed in the diagram.

1. _____
2. _____
3. _____

3 marks

Question 18

List and explain two things to consider when converting printed documentation to online documentation.

1. _____

2. _____

2 marks

Question 19

Complete the Help Desk log shown below with the four **most** appropriate descriptions of either the **problem** or the **solution**.

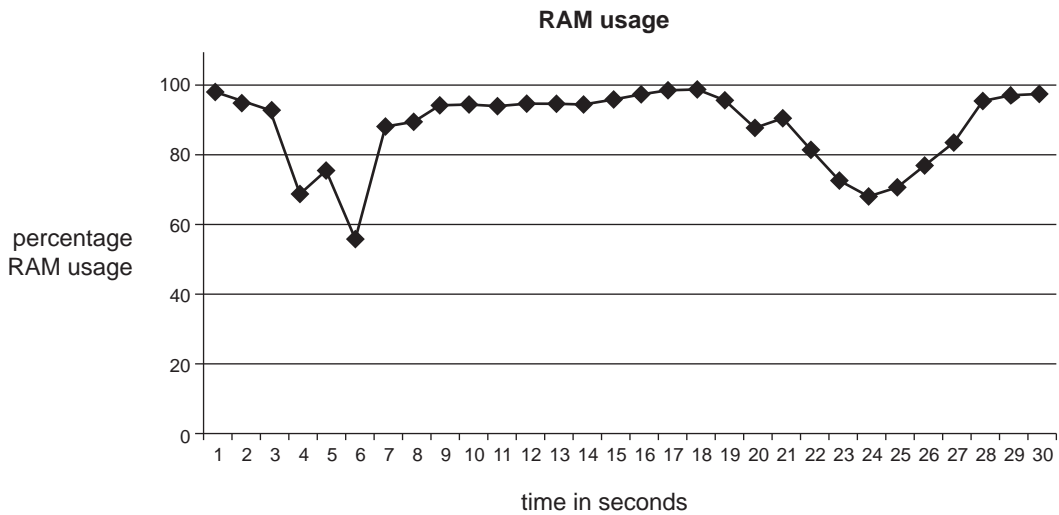
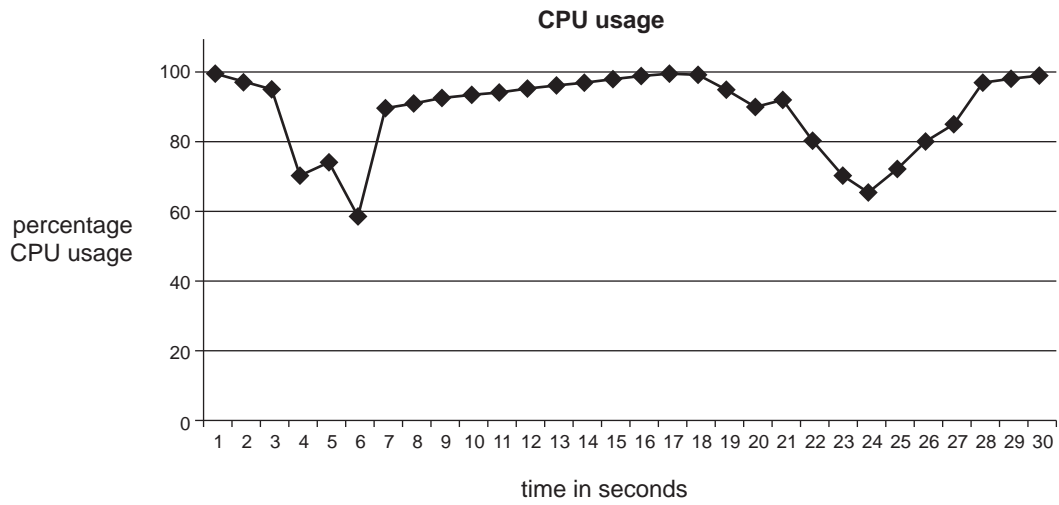
Date	Client	Problem	Solution
28/10/2011	Barry	He has downloaded some photos from his digital camera, and the images do not fit on the page	
31/10/2011	Ellen		Reset login password
2/11/2011	Mei	She is trying to print some text on a web page directly from the Internet and it will not print	
4/11/2011	David		Access yesterday's backup tape and restore required files

4 marks

Question 20

A client asked you why his hard disk always seems to be busy when he uses photo editing software. He also told you that when the photo editing software is running, other software runs very slowly.

Diagnostics generated the following CPU and RAM usage charts.



- a. What do these charts indicate is happening with the software in the personal computer?

2 marks

- b. Describe one way the system could be modified to improve its performance. Justify your decision.

2 marks

Question 21

Distribution of software and data over the Internet often uses 'Archived' or 'Compressed' file formats, such as ZIP, RAR and Stuffit.

Tick (✓) the boxes which indicate four correct statements about archived or compressed files.

- The files are compressed by removing unused parts of the file.
- The files are compressed by converting numeric fields to binary.
- Some files cannot be compressed, becoming larger in the archive.
- For compatibility, all compression programs use the same formats.
- The file's name, date and size information are stored in the archive.
- The data is encrypted, providing better security during transmission.
- Different compression schemes can be used for different types of files.
- The files contain inbuilt checksums to detect corruption during transmission.

4 marks

Question 22

Eloise is a freelance graphics and multimedia designer who does photo and video editing. Some of her client work also involves 2D and 3D animation.

Eloise wishes to upgrade her desktop computer because she has upgraded her software applications and they run too slowly on her existing computer. The specifications of Eloise’s existing computer are described in the table below.

CPU	Dual Core 32-bit
RAM	1 GB
video card	512 MB with fast GPU
hard disk drive	500 GB 5400 rpm
monitor	25-inch LCD

a. Suggest two upgrades that will help Eloise run her software faster, giving one reason to justify **each** upgrade.

1. _____

2. _____

2 marks

b. Eloise’s new software is a 32-bit version. Recommend to Eloise whether to upgrade to a 64-bit version, explaining your recommendation.

1 mark

Question 23

A telemarketing company needs advice on a major server upgrade that will have the latest spyware, firewall and antivirus security. It is considering using RAID technology on the server, which will have an uninterruptible power supply (UPS). The RAID server has two large disk drives and automatically writes all data to both drives as a backup mechanism.

If one drive fails the server continues, using the other drive. Since the other drive has a copy of the failed drive's data, no data is lost.

You are advising management about this RAID system.

- a. Describe two types of data loss that this system does **not** prevent.

1. _____

2. _____

2 marks

- b. Describe a strategy to protect against these data losses.

3 marks

Question 24

Sally is designing a user manual. It will be in loose-leaf, ring-bound A5 format (210 mm high, 148 mm wide). She will update it with amendments and inserted pages several times a year. Sally researched a number of proposed style elements.

Explain why Sally rejected each of the following styles.

- a. **Footers** – All footers contain the revision number of the page and the date it was issued on the inside (binder) edge, and the page number on the outside edge. Page numbers are whole numbers, consecutive throughout the document.

1 mark

- b. **Page margins** – Top margin is 15 mm. Bottom margin is 20 mm (including 5 mm footer). Left and right margins are 5 mm.

1 mark