

Victorian Certificate of Education 2004

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

| | STUDEN | Γ NUMBE | ER | | | Letter | | |
|---------|--------|---------|-----------|--|--|--------|--|--|
| Figures | | | | | | | | |
| Words | | | | | | | | |

VCE VET INFORMATION TECHNOLOGY (General)

Written examination

Friday 29 October 2004

Reading time: 3.00 pm to 3.15 pm (15 minutes)

Writing time: 3.15 pm to 4.45 pm (1 hour 30 minutes)

QUESTION AND ANSWER BOOK

Structure of book

| Section | Number of questions | Number of questions to be answered | Number of marks |
|---------|---------------------|------------------------------------|--------------------|
| A | 20 | 20 | 20 |
| В | 20 | 20 | 45 |
| C | 7 | 7 | 18 |
| | | | Total 83 |

- 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 16 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 electronic communication 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.

Ouestion 1

You want to obtain feedback about a software package from a very large group of users working for a national company. The most efficient way to do this would be to

- **A.** observe a group of users.
- **B.** conduct an online survey of the users.
- C. conduct interviews with each of the users.
- **D.** ask other companies using the same package.

Question 2

Which one of the following is **not** a feature of the system specifications for software?

- A. cost
- B. RAM
- C. processor speed
- D. hard disk capacity

Question 3

Which one of the following is a **required** feature for an operating system?

- A. web interface
- **B.** graphic user interface
- C. file management capabilities
- **D.** software drivers for a sound card

Question 4

A virus **cannot** spread to a floppy disk if the disk is

- **A.** full.
- **B.** bootable.
- C. formatted.
- **D.** write protected.

Question 5

The best people to test user documentation for software newly introduced to an organisation are

- **A.** the users of the software.
- **B.** the technicians installing the software.
- **C.** the accountant signing the cheque to pay for the software.
- **D.** the software developers at the company selling the software.

The primary purpose of a 'quick reference card' is to

- **A.** list key steps for common functions of hardware or software.
- **B.** list contact details for hardware or software manufacturers.
- **C.** provide full specifications for hardware or software.
- **D.** maintain a log of Help Desk calls.

Question 7

A customer phones the Help Desk asking for instructions to install a sound card.

Which instruction should the Help Desk operator give first?

- **A.** turn the power off
- **B.** load the sound card driver
- C. switch the PC on and login to the Help Desk
- **D.** take the cover off and plug the card into the expansion slot

Ouestion 8

Signing off new user documentation should only occur after which of the following stages is complete?

- A. supervisors have checked the user documentation
- **B.** alterations are made to documentation according to feedback
- C. a meeting to discuss the appropriateness of documentation is held
- **D.** surveys of users carried out to evaluate the documentation are returned

Question 9

User documentation is most likely to be used by a

- **A.** systems designer.
- **B.** systems engineer.
- C. database designer.
- **D.** database input operator.

Question 10

A large organisation has user documentation that is regularly accessed by staff. The documentation needs to be constantly updated to ensure it is current.

The **most** suitable place for the user documentation to be accessed would be the

- A. World Wide Web.
- **B.** organisation's Intranet.
- **C.** CD-ROM in the library.
- **D.** hard copy at the Help Desk.

You have written a macro that performs a task correctly and very efficiently in the operating environment. The supervisors have reported back to you that although all operators have been trained to use the new macro, very few are using it.

What is the **most** appropriate action to take to get the operators to use the macro?

- **A.** check the installation of the macro again
- **B.** provide online assistance in the use of the macro
- C. provide lunchtime training in the operation of the macro
- **D.** interview the operators to discover their reasons for not using the macro

Question 12

A new operating system has just been installed on your personal computer and the following instructions have been left on your desk.

Hold the Control+Alt keys and press delete to get a login screen

Enter your Username and Password

You ring the Help Desk and explain that you have never had to login before and do not understand the instructions.

What is the **most** appropriate response from the Help Desk?

- A. give you the Username and Password over the phone and talk you through the login procedure
- B. send you an email with your Username and Password plus instructions on how to login to the computer
- **C.** arrange for a person with the skills and knowledge to provide you with training on how the new operating system works
- **D.** send you a copy of the CD-ROM that came with the operating system so that you can access the Read Me files for yourself

Question 13

Desktop publishing software was upgraded on all office PCs a month ago. Help Desk staff have sent an online evaluation form to all users of this upgraded software.

The purpose of this online evaluation and feedback form is to

- **A.** check whether all users' emails are working.
- **B.** confirm that the software is performing as expected.
- **C.** confirm that the latest virus software service pack was installed.
- **D.** obtain all users' computer details for the Help Desk database.

Ouestion 14

Pat wants to buy two new software packages for the computer system his company uses. The system requirements for each software package are outlined below.

| Software package | RAM | Hard drive |
|------------------|-----|------------|
| 1 | 256 | 30 MB |
| 2 | 256 | 40 MB |

What is the minimum specification Pat will need to install **both** new software packages?

- A. 256 MB RAM and 30 MB hard disk
- **B.** 256 MB RAM and 70 MB hard disk
- C. 512 MB RAM and 30 MB hard disk
- **D.** 512 MB RAM and 40 MB hard disk

Before providing personal computer training to a user you should

- **A.** discuss their requirements and develop their skill level.
- **B.** not worry about their skill level and just prepare the training.
- C. check their current skill level and discuss their requirements.
- **D.** prepare all the training materials and arrange the time for the training.

Ouestion 16

TCP/IP is used on the Internet to allow communication.

What does TCP/IP stand for?

- A. Transmission Control Protocol/Internet Protocol
- **B.** Transmission Control Protocol/Internet Provider
- C. Transient Computer Protocol/Internet Protocol
- **D.** Transient Computer Protocol/Internet Provider

Question 17

A standard holiday request form for an organisation would be best completed using

- **A.** a customised toolbar.
- **B.** an auto text.
- C. a template.
- **D.** a macro.

Ouestion 18

Mark wants to upgrade the web site and software his company uses to collect and process data from clients online. He is planning online help for his existing clients.

Which change is most likely to cause his clients the greatest problems?

- **A.** using new data file formats
- **B.** using icons as well as menus for links
- C. finding new options in the help menus
- **D.** finding the menu in a new location on the screen

Question 19

Most computer operating systems have a boot mode known as 'safe mode'.

Safe mode boots the operating system with a minimum configuration and can be used to

- **A.** install new hardware or software when it is not recognised during the boot process.
- **B.** solve problems when new hardware or software installation is causing problems.
- C. provide access to the network if the network card drivers have not been installed.
- **D.** allow software and hardware to be tested before the operating system is upgraded.

Ouestion 20

Which one of the following best describes the actions of a 'disaster recovery plan'?

- **A.** periodically changing all passwords
- **B.** destroying all old versions of user documentation when a system is upgraded
- C. replacing hard drives when full capacity is reached
- **D.** restoring your critical services and data after a major failure of the services

SECTION B – Short-answer questions

| Instru | ctions | for | Section | R |
|---------|--------|------|-----------|---|
| 1112U U | | 1471 | 260 11011 | |

Answer all questions in the spaces provided.

| _ | 4 • | 4 |
|-----|---------|---|
| () | uestion | - |
| v | ucsuun | _ |

| Qu | estion 1 |
|-----------|--|
| Γhe | owner of a small business is looking for new chairs for the computer workstations. |
| a. | Name one 'ergonomic' feature a chair should have to ensure the health and safety of the computer users |
| b. | Explain how this feature adds to the health and safety of the users. |
| | 1 + 1 = 2 marks |
| Que | estion 2 |
| A c | omputer technician has been asked to prepare some PCs for recycling. These computers have confidential on them that must be removed. |
| | wer. |
| | |
| | 2 marks |
| Que | estion 3 |
| | ry time Jean opens her word processing software a standard blank letter appears. Most of her work involves ng reports, not letters. |
| a. | What change could be made so that Jean has a blank standard report open each time? |
| b. | How could this change be achieved? |
| | |

You are an IT consultant and have been contacted by the management of Icarus Internet. They are dissatisfied with the performance of their IT Help Desk and ask you to draw up a **service level agreement** for their Help Desk.

| List | three major points that should be included in the agreement. |
|----------|---|
| 1 | |
| 2 | |
| 3 | |
| | 3 marks |
| Que | estion 5 |
| The only | file in the AFL computer system that contains the ticket prices for finals matches is marked as 'read'. |
| a. | What does read only mean? |
| b. | Explain why the file containing ticket prices is read only . $1 + 1 = 2 \text{ marks}$ |
| | 1 + 1 = 2 marks |
| Que | estion 6 |
| RAI | M and ROM are two common types of memory. |
| Exp | lain two differences between them. |
| 1 | |
| | |
| 2 | |
| | |
| | |

The Australian Army has a server that is set up with a licence for 30 concurrent users. The office that this computer services works 24 hours per day with 3 shifts and has the following staff who all use computers.

| Staff | Morning shift | Afternoon shift | Night shift |
|---------------------|---------------|-----------------|-------------|
| Managers | 2 | 5 | 1 |
| Data entry officers | 15 | 25 | 2 |
| Data analysists | 5 | 5 | 3 |

| Has | s the army breached its licensing agreement? Explain your answer. |
|----------|---|
| | 2 marks |
| | |
| Qu a. | why is it important to list the Occupational Health and Safety (OH&S) standard in a policy and procedures document for an IT business? |
| | |
| b. | List two items that should be included in an OH&S policy document for an IT business. |
| | 1 |
| | 2. $1 + 2 = 3 \text{ marks}$ |
| Qu | estion 9 |
| | e Help Desk has scheduled the installation of an upgraded operating system in two weeks. The Help Desk ds an email to all the affected users to notify them of the upgrade. |
| Lis | t three reasons why the Help Desk would notify the users in advance. |
| 1. | |
| 2. | |
| 3. | |
| | 3 marks |

| Joan works for a company that has taken over another business. The computers in each business use a different |
|---|
| operating system. An emulation program has been installed on Joan's computer to assist her with work that |
| covers tasks from both businesses. |

| a. | What is an emulation program? | |
|------|---|------------------|
| b. | How would this emulation program benefit Joan's company? | |
| | | |
| | | 1 + 1 = 2 marks |
| Qu | estion 11 | |
| Tele | ephone support is a widely used form of Help Desk service. | |
| Exp | plain how this support strategy works. | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | 2 marks |
| Ou | estion 12 | |
| _ | intenance of your hard disk drive on a PC is important. | |
| | t two maintenance tasks that should be conducted on a regular basis. | |
| | | |
| 1. | | |
| 2. | | |

| A computer technician installs a new 180 GB hard drive into an 'older' computer. When she prepares to partition |
|---|
| the drive, a message appears indicating that the drive is only 137 GB in size. |

| a. | What could be the cause of this problem? |
|----------|---|
| b. | How could the computer technician solve this problem? |
| | 1 + 1 = 2 marks |
| Que | estion 14 |
| | owners of a small clothing business have limited knowledge of computers. They ask you why they should rade their computer operating system. |
| List | two reasons you could give. |
| 1 | |
| 2 | |
| - | 2 marks |
| Que | estion 15 |
| | usiness computer magazine advertises that a software program can be 'easily installed and configured by owing screen prompts'. |
| a. | What does this mean? |
| b. | Give one example of configuring. |
| | |
| | |

Keith, a computer manager for a share-trading firm, has become aware of problems with workstation security. He knows that some staff are sharing their passwords to get around the security.

Keith is investigating the use of 'biometric' scanning devices that read fingerprints. These would be installed at each workstation and automatically log the user in. If the screen saver comes on, the fingerprint would again be required to unlock the workstation. This system can also be upgraded with finger print scanners able to open doors.

| a. | How would the use of biometrics improve the security of the organisation? |
|------|--|
| | |
| b. | Suggest two procedures Keith needs to follow when staff who use the biometric security leave the organisation. |
| | 1 |
| | |
| | 2 |
| | |
| | 1 + 2 = 3 marks |
| Que | estion 17 |
| | ne companies offer to backup an organisation's important files by encrypting and moving them electronically in offsite storage location. |
| Ider | tify two potential problems with storing data backups in this way. |
| 1 | |
| 2 | |

SECTION B – continued TURN OVER

Big Time Software is selling a new software package for small business.

| _ | | 4 | _ |
|----|---------|---|---|
| () | uestion | п | X |

| The | Help Desk at Big Time Software has been asked to monitor all reported problems with the new software. |
|------|--|
| a. | Describe one procedure the Help Desk could use to monitor such problems. |
| | |
| | owner of one small business that has purchased this software package wants to know what type of software ares Big Time Software is obliged to fix. |
| b. | What answer would you give? |
| | 2 + 1 = 3 marks |
| Que | estion 19 |
| List | two reasons why it is important to obtain feedback from clients who are being trained in the use of a new |

Question 20

operating system.

A computer retailer recommends that the new computers in a public library all have USB ports. What are **two** benefits of upgrading to USB technology?

2 marks

2 marks

Total 45 marks

SECTION C – Case study

Instructions for Section C

Read the case study below and answer the following questions in the spaces provided.

Sport For All is a community based club that organises teams and coaching for local junior and senior football, netball, soccer, tennis and volleyball. The government pays for the full-time club secretary, Bill, and for coaches for all of the teams. The club has sponsorship deals with the local shops, cafés and fitness centres.

Currently Bill has a desktop computer with spreadsheet and word processing software and an Internet connection. Bill uses a template to prepare the teams' results each week. He also uses a macro to include the filename, the date and the team codes in the document footer when a file is saved. Bill prints the teams' results on a black and white laser printer. Bill currently includes 'action shots' from the games if they are given to him on disk.

The coaches prepare their team lists every week, each using their own template. Some of the coaches also use a macro to include the filename, the date and their team's code in the document footer.

Recently the club received a grant to update their computer system. The coaches have all been given digital cameras and laptops with CD drives and CD burners. Bill has a new desktop computer that is networked to a colour printer and scanner-photocopier. The coaches will all have the same software and they can connect to the Sport For All network and the Internet. Bill has agreed to administer the network.

| Question 1 |
|--|
| The coaches employed by Sport For All will have to transfer the images taken on their new digital cameras to their laptops. What sort of initial training would you recommend they have? |
| 1 mark |
| Question 2 |
| The club secretary, Bill, will receive image files on disks, CDs, memory sticks and by email. What sort o training would you recommend for Bill? Give one reason for your answer. |
| |
| |
| 2 marks |
| Question 3 |
| Sport For All has decided to update and standardise all the club's templates and macros when they get the new networked equipment. |
| Do you agree with their decision? Explain your answer. |
| |

| | 4. | 4 |
|---|---------|---|
| • | uestion | 4 |

| kep | coaches will have to prepare weekly team lists using the new computer system. Player details will all be ton spreadsheets. Word processing software will be used to prepare and print team lists including diagrams playing positions. |
|-----|--|
| Des | scribe a macro the coaches could use to make this job easier. |
| | |
| | 2 marks |
| Que | estion 5 |
| | is worried that hackers will get into files kept on the coaches' laptops and access the confidential membership ormation via the coaches' email accounts. |
| a. | Suggest a technology Bill could use to protect the system. |
| | |
| b. | Explain how this technology works. |
| | |

1 + 1 = 2 marks

Sport For All has a large number of local sponsors who receive promotional material to display in their businesses. Most of the businesses will now be sent coloured leaflets with details of the teams' activities and results. Others will run continuous slide presentations of activities and results on screens at their sales counters or in display areas. These sponsors will receive their information on a CD-ROM.

To automate the distribution of the promotional material the club secretary has written the following macro.

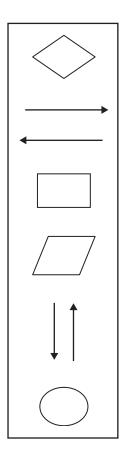
```
If user is "Paper" then
post_out "Leaflets"

Else

If user is "Electronic" then
post_out "CD"

Else
No-mailout
End if
```

- **a.** What **two** decisions are made by this macro?
- **b.** Using any of the shapes and arrows shown below, draw a flowchart of these decisions.



| Bill | has to write a disaster recovery plan. |
|------|--|
| 0 | Why does Sport For All need a disaster recovery of |

|). | List three items that Bill should include on the plan. |
|------|---|
| | 1 |
| | 2 |
| | 3 |
| 3ill | has decided to buy a UPS for the server. |
| 2. | What is the purpose of a UPS? |
| | |

1 + 3 + 1 = 5 marks

Total 18 marks