

Victorian Certificate of Education 2004

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

|         | STUDEN | Γ NUMBE | CR |  |  | Let |  |  |
|---------|--------|---------|----|--|--|-----|--|--|
| Figures |        |         |    |  |  |     |  |  |
| Words   |        |         |    |  |  |     |  |  |

# VCE VET INFORMATION TECHNOLOGY

# (Software Applications)

# 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<br>marks |
|---------|---------------------|------------------------------------|--------------------|
| A       | 20                  | 20                                 | 20                 |
| В       | 20                  | 20                                 | 45                 |
| C       | 6                   | 6                                  | 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 17 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.

#### **Question 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 | 26011011 |   |

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 <b>one</b> '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>b.</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 <b>read only</b> mean?  |
| b.       | Explain why the file containing ticket prices is <b>read only</b> . $1 + 1 = 2 \text{ marks}$           |
|          | 1 + 1 = 2 marks   |
| Que      | estion 6  |
| RAI      | M and ROM are two common types of memory.   |
| Exp      | lain <b>two</b> 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<br>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 <b>two</b> 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 <b>two</b> 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        |   |  |  |
| <b>-</b> | 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 <b>two</b> 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 <b>two</b> 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 <b>one</b> 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.

Trendy Artists is a business owned by Cliff and Freda. They have large art and craft exhibitions at their gallery. Cliff, as manager, set up the business several years ago. Sales are increasing and the list of quality artists who have their work displayed at the gallery's exhibitions is becoming very large.

Freda prepares financial reports for all artwork bought and sold. All details of sales are entered on a spreadsheet. The details include: records of all artworks sold, moneys received in and paid out and commissions received by the gallery. She presents a monthly report which summarises the information on sales and income for the previous month to the manager, Cliff.

Kim is an employee of the gallery. She has a range of duties including entering all details for sales of artwork into the spreadsheet Freda uses. Kim answers all enquiries from customers and artists. Customers and sales are expected to increase markedly. Kim also produces the gallery's brochures, which display artworks and artist details for each exhibition.

| uestion 1   |
|---|
| reda completes a financial report each month using a template document.   |
| uggest why Freda uses a template for this task.   |
|   |
|   |
| 1 mark  |
| uestion 2   |
| simple spreadsheet is used to record all artworks on display and artist information. The list of artworks is ery long and takes a great deal of time to go through. |
| reda needs the data to be listed by date of acquisition, surname of artist or an identification number for each twork.  |
| That <b>two</b> spreadsheet features would you include to assist Freda in this task?  |
|   |
|   |
|   |

Kim would like to be able to print customer receipts from the screen at the time of purchase.

She has designed the data input section of the screen form shown below.

Add two items to the form that will be required to print a valid receipt.

| TRENDY ARTISTS  ABN 322 223 345 12 North Street Richmond |  |
|--|--|
| Artwork number:  |  |
| Details of receipt:                                      |  |
|  |  |
| GST Total  |  |
| CANCEL   |  |

A sample of the data in the spreadsheet file that lists the artists' names and addresses is shown below.

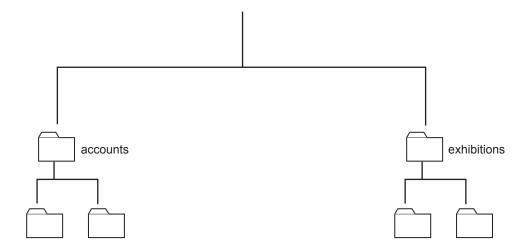
| Name    | White, Kris | Red, Maree | Green, Eli | Brown, Lee |
|---------|-------------|------------|------------|------------|
| Address | 11 West St  | 12 East St | 1 North St | 7 South St |
|         | BAIRNSDALE  | BENDIGO    | RICHMOND   | TERANG     |

Kim writes the names and addresses on the standard letter prepared for her. She reads the details off the spreadsheet shown above and copies the information when addressing the envelopes for the mailout to artists.

Kim would like to use the artists' details in this spreadsheet and a mail merge function to automate the task of sending out letters.

| a. | Give <b>two</b> advantages of using mail merge. |                    |
|----|---|--------------------|
|    | 1.  |                    |
|    | 2   |                    |
| b. |   |                    |
|    | 1.  |                    |
|    | 2.  |                    |
|    | <del>-</del> \                                  | $2 \pm 2 = 4$ mark |

Trendy Artists gallery has a directory structure with the C drive as its root directory.



Kim creates templates that will be used for exhibition brochures.

- **a.** Indicate on the diagram above where the brochure templates for the brochures should be saved.
- **b.** What is the absolute directory path for the brochure templates?
- c. How can she protect the brochure templates from being modified?

Kim wants to have all file names with directory location shown automatically on the bottom of each page. A macro has been suggested.

**d.** Should this be a local or global macro? Justify your answer.

1 + 1 + 1 + 2 = 5 marks

The gallery currently charges a commission (the fee paid to an agent for their services) on sales. The following pseudocode was used to assist in the development of a macro.

If 'sale\_price' is less than or equal to \$100 then
Commission is 'sale\_price' multiplied by 10%

Else
Commission is 'sale\_price' multiplied by 5%

End if

What decision is made by the pseudocode above?

A new commission rate of 3% will be introduced **only** for artworks sold for \$5000 and above.

**b.** Rewrite the pseudocode to include this change. The first two lines have been provided for you.

If 'sale\_price' is less than or equal to \$100 then

Commission is 'sale\_price' multiplied by 10%

1 + 3 = 4 marks

Total 18 marks