**Victorian Certificate of Education
2002**

STUDENT NUMBER

Letter

Figures

Words

VCE VET INFORMATION TECHNOLOGY
(Software Applications)
Written examination

Friday 1 November 2002

**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
B	18	18	52
C	7	7	20
		Total	92

- 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

Question 1

Amardeep has a small financial advisory business. He is mainly concerned with the effect of changing interest rates on clients' investments. He wishes to use a package that will allow him to manipulate figures and predict future returns on investment.

He would be best advised to use a

A. database package.

B. publishing package.

C. spreadsheet package.

D. word processing package.

Question 2

For a birthday present, Tyler received a CD-ROM game. The table below outlines the PC system requirements to run the CD-ROM game and provides specifications for Tyler's existing personal computer.

PC minimum requirements	Tyler's PC specifications
• Pentium 120 MHz	• Pentium 133 MHz
• 32 MB RAM	• 16 MB RAM
• VGA monitor	• SVGA monitor
• Double CD-ROM speed	• Quad CD-ROM speed

What upgrade does Tyler need to make to his PC to successfully run the CD-ROM game?

A. RAM

B. CPU

C. screen display

D. CD-ROM speed

Question 3

The ability of the monitor to operate at various display standards depends on

A. the video card.

B. the sound card.

C. the network card.

D. the memory card.

Question 4

While on duty at 8.00 am as the Help Desk operator for Allcomp, you receive the following three calls for support in quick succession.

Call 1 – The training coordinator needs to urgently download photos from a digital camera, for a training manual due for printing next week, but does not know how to download them.

Call 2 – A secretary cannot access email. She needs to send a message to all employees about the Christmas function to be held in three months time.

Call 3 – The inventory clerk needs to print out invoices that need to be sent to clients by the end of the day. The printer seems to be jammed with paper.

The three calls should be prioritised from highest to lowest in the order

A.   call 2, call 1, call 3

B.   call 2, call 3, call 1

C.   call 3, call 2, call 1

D.   call 3, call 1, call 2

Question 5

You are a Help Desk operator. A client has rung the Help Desk for assistance.

Which **three** essential pieces of information do you need from the client in order to log the call?

A.   problem, name of client, date logged

B.   name of client, problem, phone contact

C.   date logged, name of client, advice offered

D.   name of client, name of Help Desk operator, problem

Question 6

A medical centre has installed a new software system to keep track of the immunisation schedules for their child patients. The software system is supposed to send out letters when immunisations are both due and overdue. However, the software system keeps printing out letters to patients who are up-to-date with their immunisations. The medical receptionist has contacted you, the Help Desk operator.

The **best** explanation of the possible problem that you could give is

A.   the software has a virus and needs to be debugged.

B.   the operating system has not been configured to handle the software.

C.   the printer software has been installed incorrectly. You need to reinstall it.

D.   the software needs to be tested in accordance with the organisational requirements.

Question 7

An equipment register should **not** contain

A.   an ID number.

B.   a product (code) number.

C.   an asset register number.

D.   a workstation serial number.

Question 8

What does an instructional manual **best** describe?

A.   the maintenance of a system

B.   the organisational rules and guidelines

C.   the information for the user on how to use the system

D.   the construction of the hardware and software that runs a system

Question 9

The testing stage for developing computer system documentation involves

A. creating the documentation, whether printed or online.

B. checking the document for content, accuracy and grammar.

C. identifying all the pieces of documentation and how they are related.

D. trying out the documentation and providing feedback on areas that need improvement.

Question 10

Which evaluation criterion would be **best** suited to test the **accuracy** of online documentation?

A. clarity of purpose

B. ease of use

C. degree of interactivity

D. use of graphics

Question 11

You have opened a file on the command line using a basic editor such as Notepad. You are able to edit this file and save the changes.

This file will be a

A. text file.

B. binary file.

C. spreadsheet file.

D. word processing file.

Question 12

File fragmentation will

A. increase the efficiency of disk caching.

B. improve poor performance of the drive.

C. allow the system to minimise disk usage.

D. cause applications to take longer to load.

Question 13

Toula's workplace has recently upgraded its computers to the latest Pentium PCs. Toula has gone into the directory structure and cannot find her document files.

A probable reason for this is

A. her screen resolution is faulty.

B. her upgrade cannot read her current files.

C. her files were not backed up and restored.

D. the RAM on her upgrade is not sufficient to run her applications.

Question 14

On a particular laptop, careless management of system resources has led to poor performance. Applications need to be closed down before other applications can be used.

The performance status, for the usage of system resources, should be

A. at 50% free.

B. at 100% free.

C. below 50% free.

D. above 50% free.

Question 15

The template for Mail Merge letters is stored as

A.   a database file.

B.   an executable file.

C.   a spreadsheet file.

D.   a word processing file.

Question 16

Which of the following **best** describes the use of a database package?

A.   an expert system

B.   a decision support system

C.   a transaction processing system

D.   a management information system

Question 17

A data flow diagram may be used in documentation for

A.   maintaining the design of system software.

B.   updating the RAM capabilities of a system.

C.   maintaining the peripheral devices of a system.

D.   understanding the layout of the user interfaces.

Question 18

A supermarket warehouse business would **best** keep track of its stock levels through

A.   a manual system.

B.   a bar coding system.

C.   a touch screen system.

D.   an Optical Character Reader (OCR).

Question 19

A cost that cannot be measured is the cost of

A.   software.

B.   lower staff morale.

C.   increase in maintenance personnel.

D.   lower incidence of sick days taken by staff.

Question 20

The Autoexec function refers to

A.   a template to replace the default template.

B.   a template that loads when an application is opened.

C.   a macro that contains instructions to detect viruses.

D.   a macro that runs when an application is opened.

END OF SECTION A
TURN OVER

SECTION B – Short-answer questions

Question 1

Where are the details of computer software usually recorded?

_____

1 mark

Question 2

A dialogue box appears on the screen every time a client tries to print. The text 'Abracadabra' appears in the box. The machine then has to be reset. From this description, what is the most likely problem?

_____

1 mark

Question 3

a. A computer programmer needs to update her skills to complete a project for her employer. There is a limited time to complete this project. The project is so important that the employer decides to invest a large part of the budget on training the programmer. List **two** advantages of using one-on-one training for this company.

1. _____

_____

2. _____

_____

b. List **two** reasons why a trainer should ask a trainee to evaluate a training program.

1. _____

_____

2. _____

_____

2 + 2 = 4 marks

Question 4

a.   What is the function of a GUI (Graphical User Interface)?

_____

_____

_____

b.   Name **two** standard navigation tools in a GUI.

1. _____

2. _____

2 + 2 = 4 marks

Question 5

A fairly recent technology is Plug and Play (PnP).

a.   What is the purpose of PnP?

_____

_____

b.   Name a PnP device.

_____

1 + 1 = 2 marks

Question 6

List **two** common causes of data loss from a file directory in a client's PC.

1. _____

_____

2. _____

_____

2 marks

Question 7

List **two** reasons for documenting a software system.

1. _____

_____

2. _____

_____

2 marks

TURN OVER

Question 8

List **two** problems that a client could experience as a result of implementing a new software package that will involve changes to current work practices.

1. _____

2. _____

<div align="right">2 marks</div>

Question 9

Describe **two** of the types of documentation listed below.

- system flow chart
- maintenance history logbook
- user manual

1. _____

_____

_____

_____

_____

2. _____

_____

_____

_____

_____

<div align="right">2 + 2 = 4 marks</div>

Question 10

What is the difference between a local macro and a global macro?

_____

_____

_____

_____

_____

2 marks

Question 11

List **three** business issues that need to be explored when considering the introduction of new technology.

1. _____

2. _____

3. _____

3 marks

Question 12

Fly By Night is a small business that supplies skilled labourers to companies. It employs twenty people from many cultural backgrounds. All employees have access to their own PC and the PCs have been recently networked into a small LAN. The receptionist is the only employee confident with her computer skills.
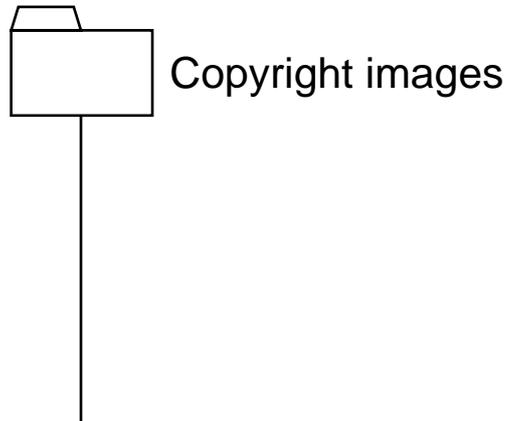
You have set up email accounts for all the employees and have been asked to create user documentation to assist the users with the email technology. List **two** employee differences that need to be considered when creating user documentation for Fly By Night.

1. _____

2. _____

2 marks

SECTION B – continued
TURN OVER

Question 13

The IT Manager of a publishing company has set up a directory for copyright images, with subdirectories for scanned, digital and web images. The publishing company has a policy document called 'Use of Copyright Images'. This document is stored at the root of the copyright images directory. Complete the directory structure diagram.

Copyright images

2 marks

Question 14

Name **two** multi-user operating systems that would be used in a client-server environment.

1. _____

2. _____

2 marks

Question 15

Planning, testing and distributing are some stages of the standard documentation process for developing computer system documentation. List **three** other stages that make up this process.

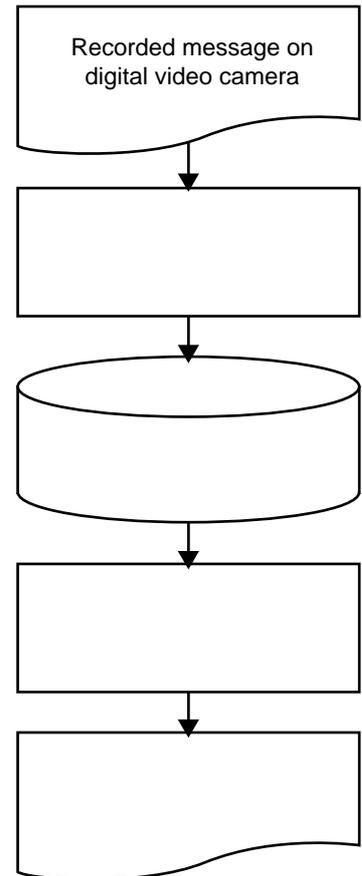1. _____

2. _____

3. _____

3 marks

Question 16

Messages 4 U is a small business that allows clients to record a message using a digital video camera. The message is then downloaded on to a PC as a file into a message directory. This file can then be burned onto a writable CD-ROM for the use of the client.

a. Apart from the PC and digital video camera, what other hardware is needed for this business?

_____

b. Complete the simple system flow chart of the Messages 4 U computer system by writing in the labels for the blank symbols.

Select from the following labels:

- Copy message to CD-ROM
- Message file on PC
- Download message from digital video camera
- CD-ROM message

c. What are the **three** main hardware system requirements that must be taken into account in the selection of a PC that can be used at Messages 4 U?

_____

_____

_____

d. What is a USB port?

_____

_____

1 + 1 + 3 + 1 = 6 marks

Question 17

Munchie Food Catering supplies and prepares food for several airline companies. The company depends on a networked computing system linking each of the company operations. One of the computers has been designated as the server, which has a tape backup drive. A simple system backup schedule for the business is as follows:

- A complete backup of the entire hard drive of the main computer system is made each week on a Wednesday night. A copy of this backup tape is produced and stored offsite.
- Partial backups are taken on the other nights, at the end of each day.

a. What type of backup system is being used?

_____

b. Why is only new or modified data backed up every day?

_____

_____

c. How could a file be recovered if a file created on Monday became corrupted on Thursday?

_____

_____

_____

d. How could a file be recovered if a file created on Tuesday was accidentally deleted on the same day?

_____

_____

_____

e. Why is a second copy of the entire data made each week and stored offsite?

_____

_____

_____

f. If the tape backup drive failed to work, suggest an alternative way the company could back up their system.

_____

_____

1 + 1 + 1 + 1 + 1 + 1 = 6 marks

Question 18

A database with the following two tables, Customer and Order, is given below.

Customer table				Order table		
Field name	**Type**	**Length**		**Field name**	**Type**	**Length**
fldFName	alphanumeric	30		fldOrderID	numeric	integer
fldLName	alphanumeric	30		fldOrdCustID	alphanumeric	5
fldCustomerID	alphanumeric	5		fldOrderDate	date	
fldCustAddress	alphanumeric	40				
fldCustSuburb	alphanumeric	30				
fldPostcode	alphanumeric	4				

a. Identify a suitable primary key for the customer table and give the reason for your choice.

_____

_____

_____

b. Identify a suitable foreign key to reference the customer table and give the reason for your choice.

_____

_____

$2 + 2 = 4$ marks

END OF SECTION B
TURN OVER

SECTION C – Case study

Emad Zephrin is a costume manufacturer and designer. He has a PC on which he runs a desktop publishing package, a word processing package and a spreadsheet package.

A friend has set up a spreadsheet template for Emad to work out his budgets for each production.

Emad has an area on the spreadsheet that allows him to cost each costume separately. He then has to transfer the cost of each costume, from the costume budget to the main budget, which is stored in another area of the spreadsheet. When Emad is using the Budget file, he often enters the wrong cell and accidentally deletes information. He does not know how to recover the deleted information. He has difficulty understanding the layout of the spreadsheet and is confused by the separate areas for each budget. He has trouble navigating from one area of the spreadsheet to another. He has great difficulty copying information from the Costume Budget to the Main Budget, and becomes extremely frustrated. He is also confused by the menu bar and toolbar options. He would like to be able to print the spreadsheet in sections, but does not know how.

Emad seems happy to use the word processor as he has excellent typing skills. His correspondence includes invoicing, quotes, business and personal letters. He types in his business details at the top of each invoice, quote and business letter. He has no standard way of writing each piece of correspondence. His invoice layouts vary according to his mood.

Emad would like to use his desktop publishing package to design a logo that can be used in his correspondence. He is often asked for a catalogue of his designs. He has investigated the cost of reproducing his designs and having them bound into a catalogue by a graphic art company. He found that this cost was too high. He has been told that his desktop publishing package could produce a catalogue of his designs at a very small cost. He always draws his designs on A4 size paper. Each design can be scanned into the computer and saved as a graphics file. He would like each page of the catalogue to hold the design and some text. The text would include the name of the production and the date of the production. It would also include his logo. He would like to be able to update the catalogue regularly.

Question 1

How could you make the company logo accessible to all of Emad's software packages?

_____

_____

_____

_____

1 mark

Question 2

What issues should be considered when making recommendations to clients about improvements to information systems?

_____

_____

_____

2 marks

Question 3

What is the difference between a macro and a template?

_____

_____

_____

_____

_____

2 marks

Question 4

List **two** macros that could be created to help Emad with the problems associated with his spreadsheet budget. Give details for the function of each macro.

_____

_____

_____

_____

_____

_____

_____

_____

4 marks

TURN OVER

Question 5

What **two** recommendations could you make to Emad to assist him to standardise his business documents? Give details for each recommendation.

_____

_____

_____

_____

_____

_____

_____

_____

_____

4 marks

Question 6

How would you ensure that the template files were able to be accessed and used by Emad?

_____

_____

_____

_____

2 marks

Question 7

a. Outline the essential information needed to produce a catalogue of Emad's designs.

_____

_____

_____

b. Draw a catalogue template to allow Emad to show his designs.

3 + 2 = 5 marks

END OF QUESTION AND ANSWER BOOK