**Victorian Certificate of Education
2003**

STUDENT NUMBER

Letter

Figures

Words

VCE VET INFORMATION TECHNOLOGY
(Software Applications)
Written examination

Friday 31 October 2003

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	17	17	46
C	7	7	20
			Total 86

- 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 19 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

Application software needed to access Internet sites is known as a

A. database compiler.

B. word processor.

C. search engine.

D. web browser.

Question 2

A company has purchased a new laser printer to be installed on a stand-alone desktop computer.

The system software that must be installed on the computer for the printer to function is the

A. operating system software.

B. application software.

C. driver software.

D. fonts software.

Question 3

You are a Help Desk operator and have logged a number of jobs.

Job 1 – The despatch clerk is unable to schedule urgent customer deliveries due to a fault with his computer.

Job 2 – The accountant is unable to print end-of-year results that are due in three weeks time.

Job 3 – The receptionist cannot access email. She wants to change the phone message system from delivering hard copy messages to sending electronic messages.

Job 4 – The payroll clerk cannot access a macro to run the wages calculations that are due in five days time.

The four jobs would be best prioritised in the order

A. job 1, job 3, job 4, job 2

B. job 3, job 1, job 4, job 2

C. job 4, job 1, job 2, job 3

D. job 1, job 4, job 2, job 3

Question 4

Harley, the Help Desk operator, has received a call from the clerk in the Accounts Department. The clerk cannot access the shared accounts database files.

Which is the **most** appropriate response that Harley could give?

A. Switch your computer off and then on again.

B. Can you identify yourself and clarify the problem?

C. Can you ring me back in half an hour if there is still a problem?

D. I will send a network technician to check the cabling on your PC.

Question 5

Which one of the following people would be **least likely** to use technical documentation?

A.   a programmer

B.   a system designer

C.   a database entry operator

D.   a computer systems engineer

Question 6

You have created a macro for a shared spreadsheet file to be used by the Accounts staff at your place of work.

How could you provide efficient and timely user access to the macro?

A.   provide on-line help

B.   create a shortcut on the desktop

C.   add a button to the standard tool bar

D.   run two applications at the same time

Question 7

An organisation requires a computer system that will accommodate ten or more clients running programs from a Client Server at the same time.

The type of operating system that satisfies this requirement is a

A.   multi-user.

B.   multitasking.

C.   multithreading.

D.   multiprocessing.

Question 8

Outlined are four logged Help Desk calls with their problems and solutions.

Help Desk call	Problem	Solution
A.	Desktop computer slow and unreliable	Defrag hard disk drive
B.	Network user cannot logon	Regenerate password
C.	Programs terminate without warning	Replace memory module
D.	User cannot access a shared database	Desktop shortcut redirected

Which problem is hardware related?

A.   Help Desk call A

B.   Help Desk call B

C.   Help Desk call C

D.   Help Desk call D

Question 9

A large organisation uses email to send weekly updates to specific groups within various departments. Current practice involves sending the email to each member of the group individually.

What feature of an email software package could be employed to make this process more efficient?

A.   the global address book

B.   the distribution list

C.   the address book

D.   the contacts list

Question 10

In a SWOT analysis, a **threat** is best defined as

A.   user resistance within the business.

B.   external factors affecting the business.

C.   forces that can adversely affect the business.

D.   business practices that an organisation can improve on.

Question 11

An organisation has developed and implemented Key Performance Indicators (KPIs) to ensure the efficient and effective operation of the organisation's Help Desk.

This process is usually formalised in a

A.   Business Plan document.

B.   Service Level Agreement.

C.   job description document.

D.   Employee Bargaining Agreement.

Question 12

You have been asked to design an implementation plan for the installation of new equipment into an organisation.

Which one of the following would **not** be included in an implementation plan?

A.   an audit of equipment records

B.   an estimate of time taken to carry out each task

C.   the timing of the introduction of the new technologies

D.   the resource requirements and individual responsibilities for tasks

Question 13

At what stage should a software system be evaluated, by both users and technical specialists, to determine how well it has met its original objectives?

A.   during systems design

B.   during implementation

C.   during day-to-day operations

D.   during conversion from an old system to the new system

Question 14

To assist with the upgrade of a network's operating environment, it is important to know the current configuration of the network being upgraded.

Which type of documentation would be used to support this process?

A.   user

B.   system

C.   policy

D.   standards

Question 15

A new default document in a word processing application is an example of

A. a macro.

B. a version.

C. a template.

D. an application.

Question 16

When importing a spreadsheet file to a database file, the columns in the spreadsheet are used by the database to identify the

A. fields.

B. data type.

C. primary key.

D. number of records.

Question 17

The **initial** objective in forming documentation for an IT solution is to identify

A. budgetary issues.

B. intended users' characteristics, needs and diversity.

C. quality and consistency within a business environment.

D. the technical problem being addressed to meet organisational standards.

Question 18

A system flow chart provides

A. details of processing within a system.

B. an overview of a program within a system.

C. a description of data requirements within a system.

D. details of decision-making and logic loops within a system.

Question 19

The read/write performance of an operating system is best optimised by

A. checking the hard disk for errors.

B. monitoring system resources with a performance meter.

C. automatically opening all regularly used applications on start-up.

D. regularly running a program to defragment files and remove gaps on the hard disk drive space.

Question 20

You receive a call from Mary, the Human Resources Manager, complaining that she is unable to save a file that she is currently updating on a shared directory. When Mary attempts to save the file the following error message is displayed: 'This file is locked for editing by another user'.

This type of issue is categorised as

A. a bug in the program.

B. access rights.

C. connectivity.

D. security.

SECTION B – Short-answer questions

Instructions for Section B

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

Question 1

List **two** resources an organisation can use to keep informed about specialised features of technology.

1. _____

2. _____

2 marks

Question 2

Why do organisations have standards for producing documentation?

_____

_____

_____

1 mark

Question 3

How does the purpose of user documentation differ from technical documentation?

_____

_____

_____

_____

2 marks

Question 4

Organisations often develop a policy to encourage a continuous improvement culture. As a result of the policy implementation, a Help Desk operates according to the 'Plan, Do, Measure, Improve' model. As part of this change in culture, feedback is seen as a positive experience. All relevant data is collected for analysis.

a. List **two** appropriate methods used to collect client feedback to monitor Help Desk performance.

1. _____

2. _____

b. How would this information be used?

_____

_____

_____

_____

2 + 2 = 4 marks

CONTINUED OVER PAGE

Question 5

Corporate Travel categorises their Help Desk support as belonging in two main areas.

       Area 1 – Problems

       Area 2 – Services

Each call is logged into a Help Desk database and is prioritised according to the following criteria.

- Level 1 – Urgent – more than five persons affected, response time within fifteen minutes
- Level 2 – Standard – general software and hardware type problems, response time within one working day
- Level 3 – Minor – something that can be scheduled to occur at a later date

a.   Julie emails the Help Desk stating that she is unable to print on the network printer in the Administration Department. At what level would you prioritise this call? Justify your answer.

      _____

      _____

      _____

b.   List **two** types of services that a Help Desk could provide for Corporate Travel.

      1. _____

          _____

      2. _____

          _____

c.   Corporate Travel's Help Desk must resolve 90% of calls logged within the specified times. How does the use of the Help Desk database enable the organisation to monitor this?

      _____

      _____

      _____

<div align="right">2 + 2 + 1 = 5 marks</div>

Question 6

Flora and Fauna (F & F) is an organisation funded by the Federal Government. It monitors the environment in each state and advises the Minister for the Environment on related issues.

A recent financial report indicated that F & F spent $2.2 million in the last financial year to support their information and communication systems.

Help Desk support is provided for hardware platforms, operating systems and software applications. Products and versions of software vary within each state office and also between states.

To reduce financial costs on F & F, the Chief Executive Officer has requested that the organisation investigate a standard computer operating environment and all necessary processes to maintain this infrastructure.

a.   What is meant by a standard computer operating environment?

_____

_____

_____

_____

b.   List **two** benefits to the organisation as a result of moving to a standard computer operating environment.

1. _____

_____

2. _____

_____

2 + 2 = 4 marks

Question 7

List **two** different functions of an operating system.

1. _____

2. _____

2 marks

Question 8

a.   What is the purpose of Virtual Memory in a computer system?

_____

_____

_____

b.   What overall gain does an organisation achieve through the use of Virtual Memory?

_____

_____

_____

_____

1 + 2 = 3 marks

Question 9

Briefly describe the function of a boot-up disk, sometimes referred to as a start-up disk.

_____

_____

_____

2 marks

Question 10

During the installation of an operating system, the Network Administrator is given the option of creating a number of partitions on a hard disk drive.

a.   What happens when a hard disk drive is partitioned?

_____

_____

_____

b.   How could this benefit an organisation?

_____

_____

_____

_____

1 + 1 = 2 marks

Question 11

Your client is upgrading their operating system and has three critical peripheral devices that they need for the operation of their business. Two of the peripheral devices are manufactured overseas. How could you quickly locate information and check that the three peripheral devices are compatible with the new operating system?

_____

_____

1 mark

Question 12

Jet Incorporated deployed twenty-five copies of a software application over a Client Server network to twenty-five clients. The Managing Director of the company asked the Network Administrator if the software was legal. The Network Administrator stated that the software was legal as the company paid for a concurrent license for fifteen users.

Has the company met its legal copyright obligation? Justify your answer.

_____

_____

_____

_____

_____

2 marks

Question 13

A service that the Help Desk at Data Communications provides for its clientele is to minimise and remove security breaches and virus attacks on the company's computer network.

a. Clients also have a responsibility to use the network in line with the organisation's guidelines. Briefly outline **two** policies that may be developed for network users to support the integrity of the system.

1. _____

2. _____

b. The company has asked you to review its virus eradication policy. A virus has been detected. List **three** steps that you would recommend to minimise any adverse effects on a company's computer network.

1. _____

2. _____

3. _____

2 + 3 = 5 marks

Question 14

As manager of Chateau, a real estate office, you have implemented changes to the current computer system and are responsible for organising a training program for the office staff. A day has been set aside for the company to provide staff training. The office staff consist of three clerical and four sales people. They need to be properly trained to use the system efficiently and effectively.

Changes to the system have meant all office staff will have to

- learn the new login and back-up procedures
- save their data to the file server, instead of saving to their individual PC hard disk
- become familiar with the upgraded operating system
- become familiar with the upgraded application software.

**a.** How could Chateau overcome user resistance to the computer system changes?

_____

_____

b. What type of training program would be suitable for the office staff at Chateau? Justify your answer.

_____

_____

_____

_____

_____

c. Apart from training, how could Chateau ensure that the implementation of the changes causes minimal disruption to the daily job tasks of the office staff?

_____

_____

_____

_____

<div align="right">1 + 2 + 2 = 5 marks</div>

Question 15

Flow chart of user documentation sign-off
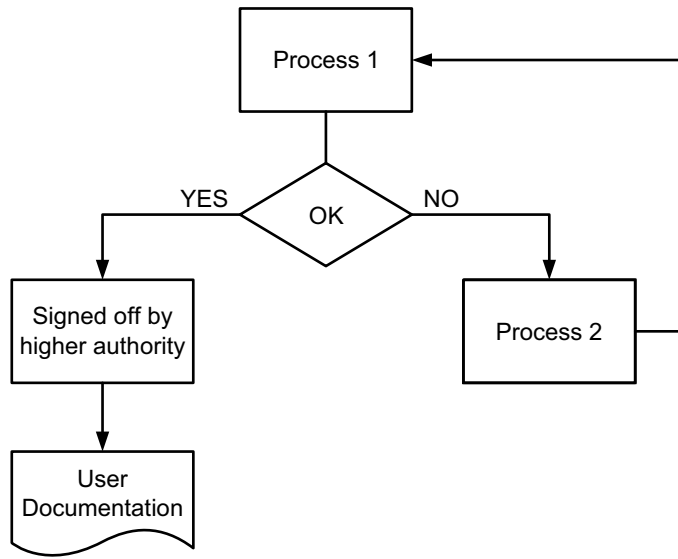
Identify and name Process 1 and Process 2 in the flow chart for 'User documentation sign-off'.

Process 1 _____

Process 2 _____

2 marks

Question 16

A client has requested that you develop a macro. The macro you have developed will not run due to a syntax error. What is a syntax error?

_____

_____

_____

_____

1 mark

Question 17

Having gained explicit permission from the owner, you can copy data from the World Wide Web to current database and spreadsheet applications. The data being copied must be in a tabular form.

a. Why must the data be in tabular form?

_____

_____

_____

_____

b. What language must the application packages be able to interpret?

_____

_____

2 + 1 = 3 marks

Total 46 marks

END OF SECTION B

SECTION C – Case study

Instructions for Section C

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

WeProvide is a conference centre with a very solid financial position. WeProvide serves the corporate and public sectors. It provides all facility requirements for conferences and receptions.

Dinh Le is the manager. Her role is to book conferences and functions and supervise the office staff. There are four office staff who share a variety of duties. These duties include regular mail outs to WeProvide's client base to advise them of new facilities. A standard word processing package is used. Each time a mail out is required, a list of clients and facilities is printed out from the database. A letter is then produced in the word processing package, with the details of the client and facility left blank. The letter is then photocopied and the name of the client and the new facility is handwritten into each photocopy from the printout. The mail out does not differ from mail out to mail out except to add a new facility.

It is a very busy office and the staff often complain that they are unable to complete their workload. They complain that when two staff are on sick leave, it causes weeks of disruption with a huge backlog of work. The office staff turnover is high.

Giorgio is head of **Marketing**. He provides standard documents to magazines and newspapers for advertising purposes. Occasionally, to advertise the conference centre, he creates flyers for mass letter-box drops. The flyers are always produced on A4. They include the company logo and details in the top left-hand corner. He uses desktop publishing software and a scanner to create his copy and his flyers. He creates his documents and flyers from the start each time, though they rarely vary in format.

Bao is in charge of **Accounts**. He prepares a budget for each conference or reception. He has a register of standard costs associated with each event. He keeps these costs in hard copy. He uses a manual system to produce his costings for the budget and writes in the list of costs from his register of costs.

Your company, IT Business Solutions, automates standard office tasks, provides training and produces documentation for their systems. **Dinh Le** has decided to ask IT Business Solutions to look at the tasks performed by the staff to see if some of the repetitious tasks could be eliminated. She would also like IT Business Solutions to look at automating **Bao's** area.

Question 1

What would you recommend to WeProvide to assist with the regular mail outs?

_____

_____

_____

1 mark

Question 2

Would you recommend group training or one-to-one training to the four office staff, if areas of their work required automation? Give **one** reason for your answer.

_____

_____

_____

_____

_____

_____

2 marks

Question 3

IT Business Solutions has decided to create various templates and macros.

a. The macros and templates may require changes over time. Why could changes be necessary?

_____

_____

_____

b. What strategy would you implement to ensure that all changes to macros and templates are recognised by the users?

_____

_____

_____

1 + 1 = 2 marks

Question 4

List **two** possible templates or macros that you could implement for Giorgio's marketing requirements in order to cut his workload.

_____

_____

_____

_____

_____

_____

_____

2 marks

Question 5

You are making recommendations for Bao's area.

a. What standard software application would you recommend to automate the budget?

_____

_____

b. Why would a template be useful in developing the budgets? Justify your answer.

_____

_____

_____

_____

_____

c. Recommend an efficient way of transferring the register of costs from a manual hard-copy based system to a computerised application.

_____

_____

_____

1 + 2 + 1 = 4 marks

Question 6

WeProvide has their clients divided into four categories
- Corporate
- Wedding
- Birthday
- Anniversary

To assist with a mail out, pseudocode for a macro has been written.

If user is "Corporate" then
      new_facility is "Video Conferencing"
Else
      If user is "Wedding" then
         new_facility is "Gift Register"
      End if
End if
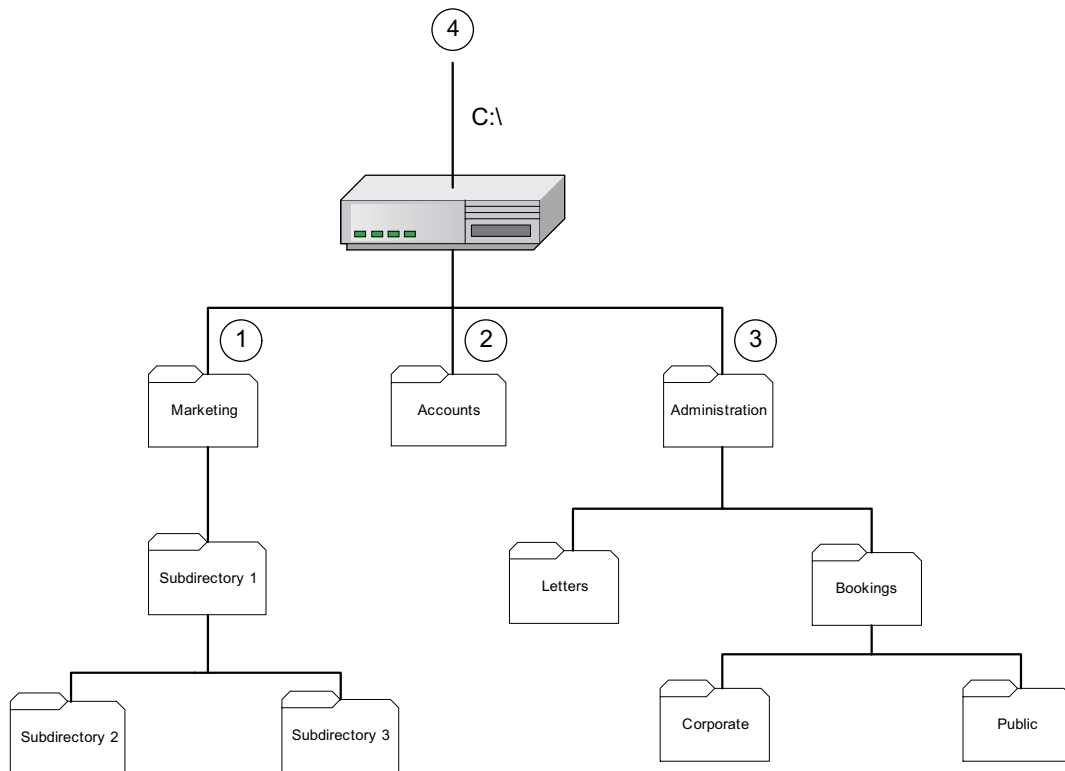
a. Which categories are not included in this mail out?

_____

_____

_____

b. What is the purpose of the macro?

_____

_____

_____

_____

_____

c. Using pseudocode, write the statement to display the contents of new_facility on the screen.

_____

_____

_____

_____

1 + 2 + 1 = 4 marks

Question 7

Following is a suggested directory structure for WeProvide.

a. Identify the root directory in the diagram above by placing a cross in the corresponding number below.

1   2   3   4

b. Complete the directory structure for the Marketing Department by recommending appropriate names for

Subdirectory 1 _____

Subdirectory 2 _____

Subdirectory 3 _____

c. Define the absolute directory path for the subdirectory titled Public.

_____

1 + 3 + 1 = 5 marks

Total 20 marks

END OF QUESTION AND ANSWER BOOK