



Victorian Certificate of Education 2005

SUPERVISOR TO ATTACH PROCESSING LABEL HERE



# VCE VET INFORMATION TECHNOLOGY (Software Applications)

# Written examination

Friday 28 October 2005

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
Α	20	20	20
В	20	20	50
C	7	7	20
			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 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 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**

Which of the following is **not** an image file format?

- A. tif
- B. gif
- **C.** mp3
- D. jpeg

#### Question 2

For a user to save time, a quick and easy way to start or run a computer application would be to

- A. create a shortcut on the desktop.
- **B.** create a batch file that runs the application.
- C. add an entry to the system configuration file.
- **D.** copy the executable file into the user's home directory.

#### **Question 3**

Which tool is the most appropriate for producing online documentation?

A tool that generates

- A. Help files.
- **B.** online tutorials.
- C. web-based authoring.
- **D.** word-processing documents.

#### **Question 4**

'All documentation should use Times New Roman font with 11 point size' is an extract taken from which type of standard?

- A. a project standard
- **B.** a template standard
- C. an industry standard
- **D.** an organisational standard

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

3

- **Call 1** The advertising manager is unable to log onto the shared network drive to immediately check page proofs for the advertising brochures to be sent to the print room.
- **Call 2** A graphic display artist cannot access email. He needs to send page proofs for the advertising brochure to the print room for a print run in two hours.
- Call 3 The despatch clerk needs to print out delivery dockets for orders to be delivered this morning. The printer seems to be out of toner.

The correct order of the three calls, from highest to lowest priority, is

- **A.** call 3, call 2, call 1.
- **B.** call 2, call 3, call 1.
- **C.** call 1, call 3, call 2.
- **D.** call 1, call 2, call 3.

#### **Question 6**

Jack runs a money-lending advisory business. He is mainly concerned with the changes of lending conditions and interest rates of the major financial institutions. He needs to use a program that would allow him to compare the impact of interest rates on clients' loans, late figures and to predict future returns on investment.

What package would he be best advised to use?

- A. database
- B. spreadsheet
- C. web authoring
- **D.** word processing

#### **Question 7**

A computer technician needs to repair a faulty power supply out of a main frame computer. What type of documentation does he require to complete the task?

- A. user reference guide
- **B.** quick reference guide
- C. technical documentation
- **D.** configuration and installation documentation

#### **Question 8**

Irene, the business manager, wants the new blank Corporate Letterhead document accessible to all staff for use in correspondence.

How can the original be protected from accidental alteration?

- A. store the original on floppy disk
- **B.** convert the document to a template
- C. give a copy of the original to each user
- D. store the original on the Hard Disk Drive (HDD) of Irene's PC

What type of information does user documentation describe?

- A. the operation of a system
- **B.** the maintenance of a system
- C. the organisational rules and guidelines
- **D.** the construction of the hardware and software that runs a system

## **Question 10**

Habib has received a picture file sent by email that he is unable to open. Which one of the following could **not** be a reason for this problem?

- A. The picture file has become corrupted.
- **B.** The picture file has a macro virus attached.
- C. The picture file has been saved without the correct file extension.
- **D.** The picture file is missing the required graphic program needed to open it.

#### **Question 11**

A sales representative has accidentally sent **two** identical emails advertising new products in a text message to the **same address**: one email has been accepted and the other email has been refused by the mail server.

From this description, what is the most likely problem?

- A. The destination email account is full.
- **B.** The destination email address is incorrect.
- C. The text of the email breaches company guidelines.
- **D.** The Graphical User Interface (GUI) is running a self-test for dialogue box generation.

#### **Question 12**

The marketing manager has requested that a directory for marketing be created with subdirectories for employees X, Y and Z. The marketing policy statement should be stored in the **root** of the marketing directory.

Which one of the following directories shows the correct file structure?



Lucy is editing a document that is stored on another computer on the network. The other computer stops working because someone tripped over its power cord but Lucy's computer is fine. Lucy rings you up to find out how she can save her work.

What should you advise her to do?

- A. reboot her computer then save the work as normal
- B. wait for the other computer to restart and both computers to reconnect and then save her work as normal
- C. wait for the other computer to restart and both computers to reconnect then recover the file from the backup tape
- **D.** reboot her computer then wait for the other computer to restart and both computers to reconnect then save the work as normal

#### **Question 14**

A new computer has been connected to a LAN (Local Area Network) for the first time. When the user tries to connect to shared file storage on the network, the computer cannot find it. In fact this computer cannot 'see' any of the other computers on the LAN at all.

What could be the source of this problem?

- A. spam filtering
- **B.** firewall settings
- C. spyware blocking
- **D.** antivirus configuration

#### **Question 15**

Why is it necessary for Mark to check the hardware compatibility list (HCL) on the Internet before installing an upgraded operating system (OS) on his company's computer?

- A. to confirm that the existing hardware in the computer is compatible with the new OS
- B. to confirm that the licensed database software is compatible with the new OS
- C. to confirm that the licensed antivirus software is compatible with the new OS
- **D.** to confirm that the warranty on the computer would not be voided by the change of OS

#### **Question 16**

Reliability is a selection criterion for new technology.

What is reliability measured against?

- A. the operational performance
- **B.** the stability of performance
- C. the gains a business may expect
- D. the future trends of the business

#### **Question 17**

Which procedure is used as a physical barrier to secure data against unauthorised access in an organisation?

- A. restrict user access to computers
- B. enforce password logon
- C. keep the firewall up to date
- **D.** keep the antivirus software up to date

A travelling sales team needs to be up to date with the availability of stock while dealing with clients. The most suitable device to store and retrieve this data would be

- A. a personal digital assistant (PDA) device.
- **B.** a memory stick.
- C. a portable zip drive.
- **D.** a portable CD–RW writer.

#### **Question 19**

As the system administrator, you have determined that fifteen desktops in the purchasing department are capable of being upgraded to the latest operating system. Budgeting approval has also been given and the licences and installation media have been purchased.

What is the next task to be completed?

- A. go to each user's machine, delete the old operating system and run scandisk
- B. notify each of the users and ask them to bring their computer to the service desk
- C. notify the users of the proposed timelines and organise training for the affected users
- D. send the operating system CD to each of the users with instructions on how to install it

#### **Question 20**

Your manager has asked you to **upgrade** the operating systems on **all** of the organisation's desktop PCs. You are not sure when the operating systems were last upgraded.

What is the first task that you should carry out before upgrading the operating systems?

- A. ask users to provide feedback on any email messages they may have received
- B. research and locate all the software licensing documentation for the organisation
- C. destroy all copies of previous versions of the operating system and documentation
- **D.** contact the suppliers and ask if they will give a refund for all the previous versions

2 marks

2 marks

# **SECTION B – Short-answer questions**

# **Instructions for Section B**

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

# Question 1

Teresa works most of the day in front of a computer and would like to get a new LCD screen monitor. List **two** valid occupational health and safety (OH&S) reasons that Teresa could use to convince her manager that she requires a new LCD screen monitor.

 1.

 2.

#### Question 2

Give two reasons why a modern computer should always be 'shut down' correctly.

I			
_			
2.			

#### **Question 3**

#### List two advantages and two disadvantages of using Internet sites as a reference source.

#### Advantages

1	
2	
Disadvantages	
1	
2	
	2 + 2 = 4 marks

#### **Question 4**

What information is provided by the 'readme' file on installation disks of new software applications?

1 mark

List two reasons for documenting application software.

2			
2			2 marks

**Question 6** 

When writing user documentation, what are three features of good practice that you should consider?

1		
2		
3.		
		3 marks

#### **Question 7**

Select three of the following acronyms.

#### XML, HTML, FTP, IRC, SMTP, POP3

State what each of the selected acronyms stands for and explain briefly what each does.

1.	
2.	
3.	
	2 + 2 + 2 = 6 marks

#### **Question 8**

A client is experiencing unusual problems installing and configuring a new hardware product. What **two** hardware-related checks should you make?

1			
2			
			<b>a</b> 1

2 marks

What two measures would you use to demonstrate improvements to a Help Desk service?

 1.

 2.

2 marks

#### **Question 10**

Colin phones the computer technician and complains that all his 'auto text' in his word processor was lost when his new computer was upgraded. He had created many auto text shortcuts, like *pz* for please, that made his work faster, and now he wants them back. The computer technician has not yet reformatted his old computer.

What should the computer technician do to fix Colin's problem?

#### **Question 11**

James from payroll has called you at the Help Desk. He has just had a new database software package installed and when he runs the application he receives the error message 'insufficient memory'.

What advice would you give James so he can successfully run the application?

1 mark

#### **Question 12**

Baby Blue Beds has installed an invoicing software package on their computers. User manuals have been sent to all the users after installation. The Help Desk has received a number of calls from users asking for help because the user manual is very technical and they are having difficulty running the software.

List two tasks Baby Blue Beds should now do to assist their users.

1.\_\_\_\_\_

2. \_\_\_\_\_

2 marks

Rosie is the new database administrator in your organisation. Rosie is a highly skilled database administrator who learns quickly, but she has had only limited experience with your organisation's database. When Rosie accepted the position it was agreed that she would be given support to help her administer the database. As part of Rosie's induction into the organisation, she must undergo a skills assessment.

Explain why Rosie needs to undergo the skills assessment.

2 marks

#### **Question 14**

a. What are two differences between a command line interface and a graphical user interface?

**b.** What is the function of a virtual machine operating system?

2 + 1 = 3 marks

#### **Question 15**

A business has recently implemented a new software package that has significantly changed the current work practices.

a.	List two problems that a business could experience with staff as a result of implementing a new software
	package.

1.	
2.	

**b.** List **two** ways that the business could overcome these problems.

1.	
h	
2.	

2 + 2 = 4 marks

SECTION B - continued

The requirements for two new software packages to be installed are

Software package	RAM	Available hard disk space
1.	256 MB	300 MB
2.	256 MB	500 MB

Current computer specifications are 384 MB RAM and 400 MB available hard disk space.

Can both packages be successfully installed on the current system? Explain your answer.

2 marks

#### Question 17

A new feature in most modern CPUs is often abbreviated to No Execute (NX). This feature can prevent some virus-like activity occurring in computers.

Some viruses that were stopped by NX were 'Blaster' and 'Sasser'. How does the NX feature stop these viruses?

1 mark

#### **Question 18**

- **a.** What is encryption when related to computer technology?
- **b.** When is it appropriate for a user to use encryption?

c. Outline one problem that could result from the use of encryption on a computer.

1 + 1 + 1 = 3 marks

Your client, WaxHead Surf Wear, currently uses a **dialup Internet account**. The company wants a **broadband connection** to the Internet but they found that the number of providers, plans and options are too confusing. Their business partners have advised that they should choose from Ardvark IT or Emu Internet and they have provided the following information.

Provider	Ardvark IT plan A	Ardvark IT plan B	Emu Internet plan A	Emu Internet plan B
Speeds	256/64	512/128	256/64	256/64
New connection setup cost	\$88.00	\$88.00	\$149.00	\$109.00
Rapid transfer setup cost	\$35.00	\$35.00	\$59.00	\$39.00
Monthly fee	\$40.00	\$42.00	\$29.95	\$29.95
Included GB	no limit	8 GB	5 GB	5 GB
Charge per excess GB	no limit	\$3.00/GB	shaped to 60 kbps	shaped to 60 kbps
Spam filtering	free	free	\$1.00/month	\$1.00/month

- **a.** Which plan offers the fastest connection?
- **b.** What does 'shaped to 60 kbps' mean?
- **c.** What is spam filtering?
- d. Why can WaxHead Surf Wear **not** use the cheaper Rapid transfer setup option?

1 + 1 + 1 + 1 = 4 marks

Fred is a 3D-graphic designer and tells you his computer is too slow and the image quality on the screen is poor. You check out his computer and agree that it is too slow and the image quality needs improvement.

His current setup is

- 800 MHz CPU
- 512 MB RAM
- 8 GB HDD
- $4 \times AGP$  video card

With the current computer budget, Fred can only afford to upgrade **either** the video card to an  $8 \times AGP$  or the RAM to 1.5 GB, but not both.

- **a.** What advantage would there be in upgrading the RAM?
- **b.** What advantage would there be in upgrading the video card?
- c. Which upgrade would you advise Fred to purchase and why?

1 + 1 + 1 = 3 marks Total 50 marks

# **Instructions for Section C**

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

Insanity Music is a second-hand audio and video disc retailer. Abdullah, the general manager, has seen the business grow quickly in the last few years. Insanity Music buys and sells a wide range of music and movies for clients. It specialises in Australian independent music titles. Insanity Music employs six people.

It operates a website that has a database of its collection. Clients can search the website and then email or phone an order through to Oscar, the clerical officer. For each order received, Oscar is required to locate the title, and pack and post it to the customer.

Derek, the stock manager, keeps a list of all purchases and sales of new stock through a catalogue file that he loads onto the server daily. He also checks the prices of titles. He works through lists and checks for items that are not selling. Insanity Music's catalogue is very large with many one-off titles and is supported by four large music publishers and a range of small independent labels. Insanity Music's advantage in the music business is the wide range of titles that it has access to.

Jenny is the marketing officer. Sales of music have been slowing recently as a result of customers moving to other music formats. Insanity Music has responded to falling sales by introducing a range of ways of encouraging customer loyality. This involves Jenny preparing a monthly brochure for a mailout of music and movie titles on sale.

Insanity Music is concerned that all of its customers do not have complete confidence with online shopping, so it continues to use a paper-based system. Abdullah would like to offer web-based online shopping in addition to his traditional methods to try to increase their business prospects in the Internet market place.

Abdullah is concerned about the inefficient methods used by his staff. He would also like his staff to be able to complete each other's roles in case of absences.

#### **Question 1**

A shopping list macro has been developed specifically for client use on the Insanity Music website. Why should the macro be saved as a local macro?

1 mark

Abdullah has decided to create various templates and macros for staff use.

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

List a strategy that Abdullah could implement to ensure that all changes are recognised by the staff
1 + 1 = 2

#### **Question 3**

**a.** With the development of the web-based online shopping, what type of client support could be implemented for the future?

**b.** If all the staff work is eventually automated, would group training or one-to-one training be recommended for the Insanity Music staff? Give **one** reason for your answer.

1 + 1 = 2 marks

Abdullah is concerned about messages that he receives when he opens files containing macros that have been locally written. He would like to disable the messages.

What steps could be taken to allow permissible macros while still giving protection from macro viruses?



#### **Question 5**

Derek regularly opens a spreadsheet file to update price lists for movies and music discs. If a disc has been held in stock for over six months he reduces the price by 50%. He passes this information onto Jenny who organises the catalogue mailout.

The spreadsheet file contains the following information.

- Title
- PurchaseDate
- DateofLastSale
- CostPrice
- SalePrice
- Location

A macro has been designed to assist Derek with his work. The pseudocode for the macro is listed below.

- 1. Create blank ExportFile
- 2. Open DataFile
- 3. Repeat

4.	If difference between today & DataFile/PurchaseDate >180 days
5.	Let DataFile/SalePrice = (DataFile/CostPrice + markup) – 50%
6.	Add DataFile/Title, DataFile/PurchaseDate, DataFile/DateofLastSale,
7.	DataFile/CostPrice, DataFile/SalePrice and DataFile/Location to ExportFile as
8.	ExportFile/Title, ExportFile/PurchaseDate, ExportFile/DateofLastSale,
9.	ExportFile/CostPrice, ExportFile/SalePrice and ExportFile/Location
10.	Else DataFile/SalePrice = ""
11.	Until EOF
12.	Close DataFile
4.0	

- 13. Close ExportFile
- 14. Dispatch ExportFile

a. How is the macro assisting Derek?
b. How could the macro pseudocode be modified so that it could check the stock held for over 100 days and reduce the price by 75%? Write the corrected line(s) of code.

**c.** Derek would like to protect the data in the spreadsheet while it is used by other staff members, while still being able to change the data himself. How can Derek achieve this?

1 + 2 + 1 = 4 marks

Jenny uses the same word-processed file regularly for the monthly brochure mailouts to customers. Jenny adds new titles and specials from the list of discounted CDs. She has decided to store this file as a template.

- **a.** How could you protect this file from alteration or deletion on the system?
- **b.** Draw a brochure mailout template for Jenny that she could use to update and send to customers.

**c.** What is the most efficient process that Jenny could use to make the brochure mailouts accessible to clients who shop online?

1 + 2 + 1 = 4 marks

Oscar receives order details and currently enters information into two spreadsheet files; one that contains customer details, and the other, order details. He has to switch between both files. It is a slow process as he has to scroll across the screen to insert relevant information. He then packs the CDs and DVDs for delivery and handwrites the address details on the outside of the package.

a. Suggest three macros that might assist Oscar with his completion of orders.



**b.** Oscar is unsure about using the macros and needs training. Is there an alternative software package or a better way of using macros to assist Oscar to enter all of the information? Explain.

3 + 2 = 5 marks Total 20 marks