



**Victorian Certificate of Education
2007**

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER

Letter

Figures

Words

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**VCE VET INFORMATION TECHNOLOGY
(Software Applications)**

Written examination

Friday 2 November 2007

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

<i>Section</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	20	20	20
B	17	17	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 21 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

In the context of user documentation, a wizard can be defined as a

- A. form of technical reference for a software program.
- B. set of procedural standards that everyone in an organisation must use.
- C. form of online documentation that provides step-by-step assistance when creating documents.
- D. time-saving template for creating documents and worksheets that meet specific organisational standards.

Question 2

Marika is a journalist who works from home and sends her completed articles to her editor by email. Unfortunately, Marika badly sprained both of her wrists while rock climbing last weekend and she will be unable to type for the next three weeks. Marika still needs to complete her article by a certain time each week.

What new technology would best help Marika with her work?

- A. tape recorder
- B. wireless mouse
- C. ergonomic keyboard
- D. voice recognition software

Question 3

The most important factor to consider when purchasing new software is

- A. how much money it will cost.
- B. the amount of hard drive storage required.
- C. the amount of RAM required.
- D. the operating system version required.

Question 4

Which one of the following is **not** an example of client feedback for a Help Desk?

- A. one-to-one training
- B. telephone survey
- C. online feedback form
- D. asking for further details on a problem

Question 5

Sandra is updating a company profile report. She has been informed that the company has recently restructured and has a different trading name.

What is the fastest method to update the report with the new company name?

- A. retype the entire report, entering the new name as you type
- B. use the automatic correct feature to correct the old company name where it occurs in the report
- C. use the **Replace** feature to replace all occurrences of the old company name with the new name
- D. use the **Find** feature to locate all occurrences of the old company name and type in the new name

Question 6

The table below compares the specifications for four computer systems.

Components	System 1	System 2	System 3	System 4
Processor	Intel Core2 Duo E6300	3.4 GHz Intel Pentium 4 650	1 GHz Intel Celeron	2.8 GHz Intel Pentium D820
Memory (RAM)	1 GB DDR2	2 GB DDR2	512 MB DDR2	1 GB DDR2-533
Graphics card	1 GB	512 MB	256 MB	512 MB
Hard disk drive	300 GB	250 GB	160 GB	200 GB
Internet connection	Yes	Yes	Yes	No
Optical drive(s)	DVD-RW	DVD-RW	DVD-ROM	DVD-ROM
Monitor	19" LCD	17" LCD	19" Flat CRT	17" Flat CRT
Audio	Integrated 5.1	Creative Sound Blaster X-Fi XtremeMusic	6 channel sound	Integrated HD
Network connection	Yes	Yes	Yes	No
Extras	Multiformat card reader	Multiformat card reader TV tuner card	Colour printer	Nil

Which system would you recommend for a person with low level computer skills, who wants to research their family tree on the Internet from home?

- A. System 1
- B. System 2
- C. System 3
- D. System 4

Question 7

Paige created a new 'Overdue Notice' template for the accounts department.

Which of the following is the best solution to distribute the template **and** protect it from alteration or deletion?

- A. store a copy in a read only folder on her PC and install it on all the accounts department PCs
- B. wait until the next scheduled backup is complete and then email it to all the people who will use it
- C. create a backup master copy on her hard drive, then make the template read only and install it in a folder that all the accounts department PCs can access
- D. she cannot achieve both objectives – once it is distributed, users can alter or delete it

Question 8

The main purposes for user documentation in a large organisation are to provide

- A. technical specifications, understanding of what the software can do, network installation requirements.
- B. understanding of what the software can do, training for skills development, a quick reference guide.
- C. understanding of what the software can do, training for skills development, network installation requirements.
- D. training for skills development, technical specifications, a quick reference guide, understanding of what the software can do.

Question 9

Kevin is the editor for a team of writers who produce training manuals. He needs to keep a record of the modifications he makes when he edits the documents produced by his writing team.

Which one of the following advanced features would best suit his needs?

- A. tracking
- B. AutoText
- C. comments
- D. strikethrough

Question 10

You receive a Help Desk call from Ellie. She is trying to scan an image and her PC has been displaying the message 'Waiting for the lamp to warm up' for over five minutes. This also happened yesterday and the problem is now urgent.

Which one of the following actions should you take?

- A. send a technician to check and replace the scanner lamp if necessary
- B. send a technician to check that the mains voltage is not too low
- C. advise her to close the application, reboot the system and try again
- D. describe to her how to access the system resources display, so you can find out whether her PC is overloaded

Question 11

When setting up a fresh operating system for a computer, which one of the following sections would **not** be considered part of the security setup for the computer?

- A. regional zone
- B. firewall configuration
- C. network configuration
- D. administrator's password

Question 12

One stage in the production of user documentation is to submit the documentation to a higher authority for approval.

This stage is referred to as

- A. testing and evaluation.
- B. endorsement or sign-off.
- C. product design and development.
- D. obtaining feedback from intended users.

Question 13

A Help Desk operator is unsure of how to solve a problem for a client.

Which one of the following is the best way to respond to the client?

- A. 'I am sorry, your problem has a low priority.'
- B. 'I need to do some initial troubleshooting. I will call back within the hour.'
- C. 'I am not sure what to do as we are extremely busy. Can you call back within a few days?'
- D. 'I have absolutely no idea! I need to consult my boss first. Please give me a call tomorrow.'

Question 14

The introduction of new technology into a large organisation requires careful consideration. Once the changes to be made are known, a smooth transition from the old to the new technology would be ensured by

- A. hiring a consultant.
- B. developing an implementation plan.
- C. completely removing the old system first.
- D. making sure that there will be enough room for the new equipment.

Question 15

You have been asked to recommend a vendor to provide a new open source operating system. Your client's staff have little or no experience with the proposed new operating system. A comparison of the suppliers is in the table below.

Local dealer	Franchisee	Website
Supply and install customised image, disks, licence	Supply disks and site licence	Downloadable ISO standard image and site licence
Phone support	Online troubleshooting database	Online forum support service
Maintenance contract	Interactive training DVD	Free website hosting
Onsite training	ISP starter bundle	Training movies
\$139	\$119	\$109

Which deal provides the best support for the client?

- A. Website, as it is the cheapest
- B. Franchisee, as it has a training DVD
- C. Local dealer because of its phone support
- D. Local dealer because of the onsite training and the maintenance contract

Question 16

Cynthia wants to create 60 address labels for a catalogue mail-out that is to be posted in the next hour. The mail merge document was set up by the previous person who did her job and Cynthia is having some difficulty with it.

The most appropriate support resource that Cynthia could access for help with this problem would be the

- A. technical manuals for the mail merge software.
- B. website for the company that sells the mail merge software.
- C. online help facility that is built into the mail merge software.
- D. seven-year-old introductory training manuals on the shelf in her office.

Question 17

When developing software applications, programmers frequently include comments to clarify the function of sections of code and to make program maintenance easier.

These comments are an example of

- A. hyperlinks.
- B. pseudocode.
- C. internal coding.
- D. internal documentation.

Question 18

Greenback Travel requires cheap online software that will allow its travel writers to write anywhere, anytime and sometimes collaboratively by exchanging files. They have investigated three online suites of Office compatible applications, which run inside a web browser.

	Alpha	Betel	Carta
Word processing*	✓	✓	✓
Spreadsheet*	✓	✓	✓
Presentation*	✓	✓	✓
Email	✓		
Calendar			✓
Project management			✓
Compatibility (MS Office, OpenOffice, StarOffice)	✓	✓	✓
Storage	✓	✓	✓
Upload/download	✓		
Track changes	✓	✓	✓
Chat	✓	✓	
Browser type	All	All	All
Requires Java installed		✓	
Cost	\$50	Free	Donation

*basic formatting such as paragraph, font, size, colour, indentation

Which one of the following is the best for Greenback Travel to use?

- A. Alpha, as it allows for file transfer between travel writers
- B. Betel, as it is free and uses Java
- C. Carta, as it has a project management feature
- D. Betel or Carta, as they are the cheaper alternatives

Question 19

Bonny BabyWare retails baby-related products. The database of its clients includes each parent's name and address, the baby's name and date of birth, and whether it is a girl or a boy. Every month Bonny BabyWare sends each new parent a personalised letter offering nine special deals, plus another deal for a boy or a girl, as appropriate.

The best way to personalise this mail would be to

- A. create two word processor templates and cut and paste the appropriate details into each.
- B. create a starting document and use a conditional mail merge to insert the appropriate girl or boy text.
- C. create a database macro to extract each name from the database and merge it with the appropriate text.
- D. create a word processor macro to extract each name from the database and merge it with the appropriate text.

Question 20

Your Help Desk receives the following calls in quick succession.

	Time	Location	Fault	Effect
1	8.12 am	Reception	Screen will not display	Must look up telephone extensions manually
2	8.13 am	CEO's assistant	CEO cannot login	Needs to access a file for a meeting in 20 minutes
3	8.14 am	Warehouse	Laser printer will not print	Cannot print today's delivery dockets
4	8.15 am	Accounts office	Unusual error message	Cannot print client account statements

There are two equally qualified staff, Jessica and Nathaniel, who can deal with these problems.

How should the work be assigned and in what priority order?

- A. They should work together on the problems in the order received.
- B. Nathaniel should work on problem 2. Jessica should work on problem 1, followed by problems 3 and 4.
- C. It does not matter who does what. They should work independently on problems 2 and 3, followed by problems 4 and 1.
- D. They should work together to solve problem 3, then one of them should work on problem 4 and the other work on problems 1 and 2, in that order.

SECTION B – Short answer questions**Instructions for Section B**

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

Question 1

Your company's accounts department regularly uses several macros in its spreadsheets. Give **one** way you could make the macros easy to access.

1 mark

Question 2

A friend has purchased a new computer that has a dual boot system installed.

a. Explain the term 'dual boot system'.

b. Give **one** advantage of a dual boot system.

1 + 1 = 2 marks

Question 3

For each of the following computer-based processes, identify whether it is a batch, real time or multitasking operation. (Tick only **one** box per process.)

Computer process	Batch	Real time	Multitasking
Processing the weekly payroll	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Servicing page requests to a busy website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring the building's security system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3 marks

Question 4

A supermarket is trialling a self-service barcode scanner where the customers can scan in and pay for their goods. The supermarket has asked customers for feedback on the system. This feedback includes the performance of staff who give customer support.

- a. Suggest **one** reason why the supermarket would ask customers for feedback.

- b. Give **one** way in which the supermarket could ask customers for feedback.

- c. The supermarket has decided to publish customer feedback statistics on its website. Give **one** reason for this action.

1 + 1 + 1 = 3 marks

Question 5

Below is a list of some common types of user and technical documentation. Tick the appropriate boxes to indicate which would be classified as **technical** documentation.

- installation procedures manual
- quick reference card
- training manual
- hierarchy chart
- maintenance history logbook
- data dictionary
- online tutorial
- context sensitive help

3 marks

Question 6

You are using a customised software package at work one evening to complete an urgent task. Your Help Desk has closed for the day. The software package unexpectedly stops with an error message you do not understand. Describe **one** action that you could take to resolve the problem.

1 mark

Question 7

John has four large files in a folder. He wants to compress them before emailing them to a client. After he runs the compression program, the compressed file is larger than the total size of the four files. Explain how this could have happened.

2 marks

Question 8

The following text was approved for publication in your organisation’s internal staff policy documentation. ‘The Internet can be accessed from all company computers. If you need help using the Internet, contact the Help Desk. Your manager can authorise individual after-hours training on request.’ The first draft was returned from the desktop publishing division looking like this.

The Internet can be accessed from all company computers. If you need help using the Internet, contact the Help Desk. Your manager can authorise individual after-hours training on request.

a. Why should the first draft be rejected?

The second draft is shown below.

The Internet can be accessed from all company computers. If you need help using the Internet, contact the Help Desk. Your manager can authorise individual after-hours training on request.

b. Why should the second draft also be rejected?

1 + 1 = 2 marks

Question 9

Brian is a cartoonist who works from home. He draws cartoons, uses a scanner to digitise them, and emails them to several newspapers. Brian often has to digitally clean up images using photo-editing software before sending them. His scanner is at least five years old.

- a. If Brian does not want to buy a new scanner, what could he buy instead?

- b. How might a new scanner be better than his old one?

1 + 1 = 2 marks

Question 10

When transferring data from one application to another, it is often necessary to convert the source data into a compatible format so that it will be accepted by the destination application.

- a. Name a common format for text transfer.

- b. Name a common cross platform open file format for documents.

- c. Explain what 'cross platform' means when it refers to data transfer.

1 + 1 + 1 = 3 marks

Question 11

Staff at a multimedia sales store currently use a shared application to book resources for demonstrations to prospective clients. Below is a copy of the table layout.

	A	B	C	D
1	Borrower	Date	Time	Equipment
2				
3				
4				
5				
6				

However, the users have had problems accessing the file when one person has it open. Some people have complained that their bookings have been deleted and replaced by those of another user. It has been reported that the current system for data entry is frustrating and time consuming to complete. The sales manager would like a summary report of the products that are being demonstrated and the people who are giving the demonstrations. You have been asked to investigate an alternative solution that will address these issues.

- a. The proposed booking system has a built-in calendar and a facility to add the details of each equipment item available, as well as the names of the borrowers. Give two advantages of these features.

1. _____

2. _____

- b. Identify two additional features that the new program must have.

1. _____

2. _____

2 + 2 = 4 marks

Question 12

A new version of the operating system (OS) your organisation uses will be released soon.

- a. Before considering the upgrade, give two considerations that would need to be addressed.

1. _____

2. _____

- b. You discover that the new OS backup system uses a different format to the current backup system. Describe two strategies you could use to overcome this problem.

1. _____

2. _____

2 + 2 = 4 marks

Question 13

You wish to purchase a new operating system. The supplier has provided the following system information.

Requirement	Minimum	Recommended
CPU	1.0 GHz	3.2 GHz
HDD space used during setup	32 GB	45 GB
HDD space in use after setup	11.2 GB	20 GB
RAM	512 MB	1 GB
Optical drive	48 × CD drive	2 × DVD drive
Audio hardware	Stereo sound capable	7.1 sound capable
Video hardware	Capable of OpenGL	Capable of OpenGL
Internet connection	Dialup	Broadband

- a. If a basic user purchases a computer with the **minimum** system requirements, what tasks will they typically use it for?

- b. If an intermediate user purchases a computer with the **recommended** system requirements, what tasks will they typically use it for?

1 + 1 = 2 marks

Question 14

Sarah runs a business which creates life-size baby dolls. The business is online and she also accepts phone and mail orders. Sarah makes the dolls' faces to her clients' specifications and uses a number of different items for the rest of the doll. There are several different skin colours, hand and arm styles, foot and leg styles, male and female bodies, and a range of clothes. Not all combinations of these parts will fit together.

- a. Give two features that Sarah could use (on both her web page and the spreadsheet she uses to process mail and phone orders) to ensure that the order is complete and the parts chosen are compatible.

1. _____

2. _____

- b. When an online client chooses an invalid combination of parts, what can Sarah do to solve this?

2 + 1 = 3 marks

Question 15

Tuckers Limited provides commercial catering equipment to hotels, restaurants and fast-food outlets. Tuckers has ten sales staff and it wants to train them all in the latest spreadsheet, word processing and presentation software. All sales staff have new laptops and most have some basic computer skills. Tuckers can only afford to have half its sales staff out of the office at once.

There are **three** options available to Tuckers.

1. Call in a consultant to create a course and run it in-house.
 2. Send the sales staff to an off-site commercial training course.
 3. Send two of the sales staff to a short course and get them to mentor the others.
- The off-site training takes seven working days and costs \$700 per participant.
 - The average salary of its sales staff is \$400 per day.
 - The consultant will charge \$2000 to personalise the course for Tuckers. It will run for three days, at a total cost of \$1200 per day (maximum of five people). The consultant guarantees that Tuckers' staff will know as much, or more, than they would have learnt at the commercial course.

a. Tick the option you would recommend.

- in-house course with a consultant
- off-site commercial training course
- short course for some staff who then mentor others

b. Give three reasons for your recommendation.

1. _____
2. _____
3. _____

1 + 3 = 4 marks

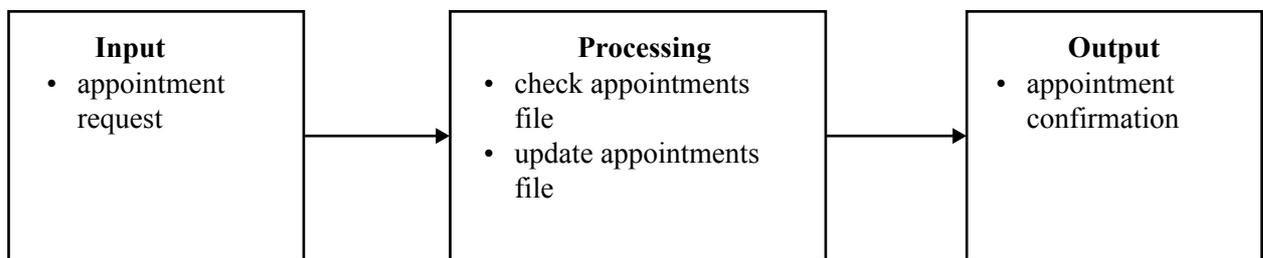
Question 16

Cherry Hill Dental Practice has an electronic record-keeping system to manage its patients' data efficiently. The current system operates as follows.

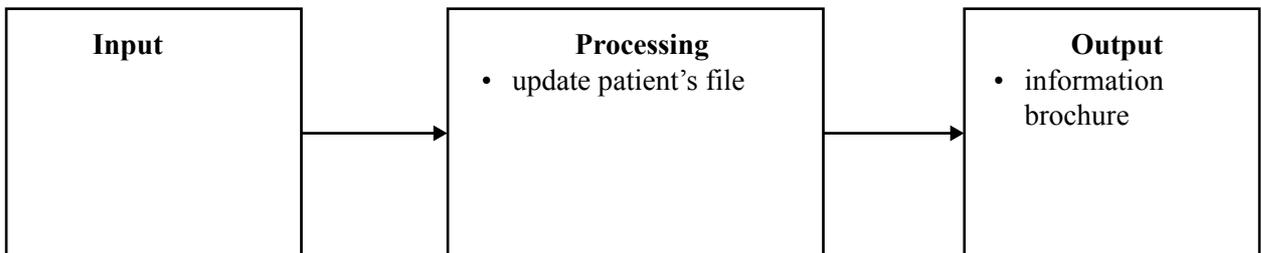
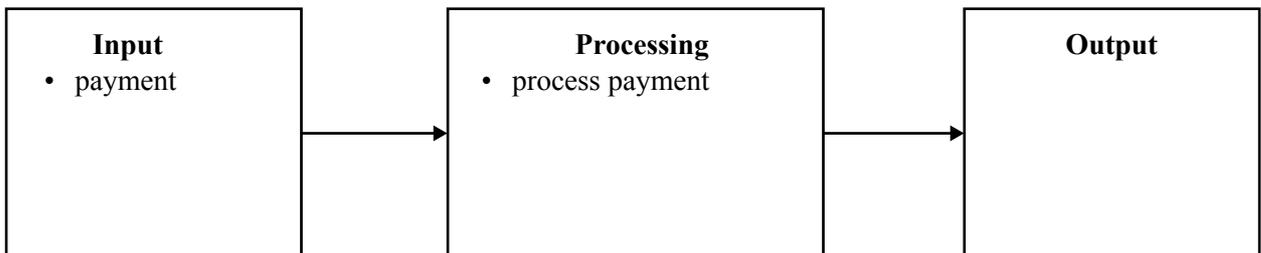
Process 1	When a patient requests an appointment the receptionist checks the appointments file for a free time slot and then confirms the date and time of the appointment with the patient. A record of the booking is sent to the appointments file.
Process 2	A new patient submits their contact details on a form, which is entered into the patient's file. The patient is posted an information brochure on the practice.
Process 3	A patient pays their account on the day of the appointment and is given a receipt. A record of payment made is sent to the patient's file.

The practice is documenting its record-keeping system.

An Input Processing Output (IPO) chart is a common form of technical documentation. The IPO for Process 1 is shown below.



- a. Complete the IPO charts for Process 2 and Process 3.

Process 2**Process 3**

- b. Name another type of technical documentation that the practice could use to document its information system.

- c. Suggest a type of user documentation that would help the dentists at the practice make better use of the system.

3 + 1 + 1 = 5 marks

**SECTION B – continued
TURN OVER**

Question 17

Below is some macro code in Visual Basic for Applications (VBA) from a word-processing application. The code was recorded using the macro recorder tool in the software.

```

1 Sub MyFormat()
2 '
3 ' MyFormat Macro
4 ' Macro recorded 13/09/2007 by Administrator
5 '
6 Selection.WholeStory
7 Selection.Font.Name = "Arial"
8 Selection.Font.Size = 11
9 Selection.ParagraphFormat.Alignment = wdAlignParagraphJustify
10 ActiveDocument.PageSetup.Orientation = wdOrientLandscape
11 ActiveWindow.ActivePane.View.Zoom.PageFit = wdPageFitFullPage
12 End Sub
    
```

- a. Briefly explain what each of the following lines of code in the macro do when the macro is run or executed.

Line number	Explanation for code
6	
7	
10	

- b. If you wanted to edit the macro so that the selected text is centred when the macro is run, which line would you change and what would you change it to?

Line number _____

Rewritten code _____

- c. Suggest another advanced word-processing feature that could be used to achieve similar results to the macro above.

3 + 2 + 1 = 6 marks

Total 50 marks

SECTION C – Case study**Instructions for Section C**

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

Ace Designs is a multimedia company that produces advertising brochures, websites, videos and television advertisements. Sally is the managing director. The company employs forty people. The business has plans for future nationwide expansion.

Malcolm is the project manager. He is responsible for making sure that the designers complete each piece of work on time and on budget. As a customer request for a particular multimedia job arrives, Malcolm uses a database to enter a job number, the customer's details, the type of work, the price quoted and the budgeted cost of the work. Customers can request work over the phone, see Malcolm in person or email him. Malcolm prints several job-listing reports weekly, to give to Sally. These reports show whether the jobs have been completed or not, and calculate the profit or loss for each job. The report screen used to print a job listing is complicated due to the many choices that Malcolm can make, from entering date ranges to various sorting options.

Toula is a designer. As she works on a job, she records the hours worked and any items that she needs to purchase for the job in a spreadsheet. When she finishes a job, she uses the spreadsheet to total her hours and calculate the total cost of her job, including her labour and any purchases. She then gives a printout to Malcolm. All twenty designers follow this procedure, but few of them are confident using spreadsheets, particularly working with formulas.

Trinh uses desktop publishing to produce the advertising brochures for the company. She stores all her customer logos, images and brochures in folders. Many of the customers she works with do the same. Occasionally she cannot find some of her files and may have to recreate some of the company logos again.

Sally is concerned about some of the work practices at Ace Designs. She has hired you as an IT consultant to make improvements.

Question 1

Trinh produces similar brochures for each customer. How would a template help her to create the brochures?

1 mark

Question 2

Recommend two ways that Toula could become more confident in using her spreadsheet to calculate the cost of her jobs.

1. _____

2. _____

2 marks

Question 3

As part of your work as a consultant you sometimes design macros and templates.

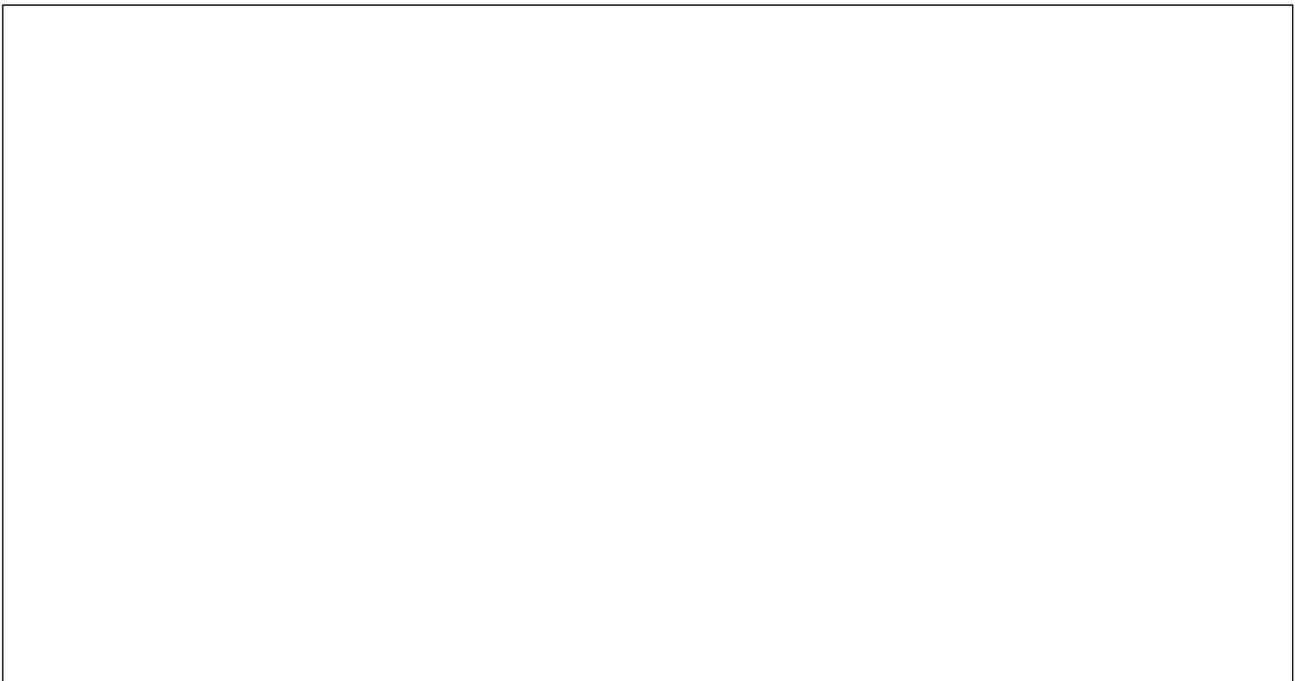
- a. Why is it important to get feedback on the macros and templates that you design?

- b. Why do you document your completed macros and templates?

1 + 1 = 2 marks

Question 4

In the space below, sketch a design for a template that could help Malcolm select which jobs to print in his job-listing reports. You should label at least four design elements that you have included and consider to be essential to the template.



2 marks

Question 5

Malcolm finds that many jobs go over budget. One reason is that the designers always submit their costs via a printout to Malcolm after the job has been finished, rather than submitting costs as they happen for each job.

- a. Describe **one** macro that could help the designers to give this information to Malcolm.

- b. After you have created this macro, what is **one** thing that you should do before installing it for others to use?

The macro to be installed is a global macro.

- c. What is a global macro?

- d. Why would the macro need to be installed as a global macro?

1 + 1 + 1 + 1 = 4 marks

Question 6

Malcolm uses a macro to print the job listing of both open and closed jobs. The following is part of the macro’s pseudocode.

1. If job is complete Then
2. Cost = MaterialCosts + LabourCosts
3. JobProfit = Sales - Cost
4. Flag job as closed and lock job
5. Else
6. Cost = MaterialCosts + LabourCosts
7. ProjectedJobProfit = Sales - Cost
8. Print job details
9. End If

a. What happens when the job is **not** complete?

Malcolm tried to print the report, but it did not print the closed jobs.

b. Write a statement to do this using the pseudocode and indicate the line number where the new line should be inserted.

pseudocode _____

insert after line number _____

Malcolm has asked you to use the company documentation standards when you write the user documentation for this macro.

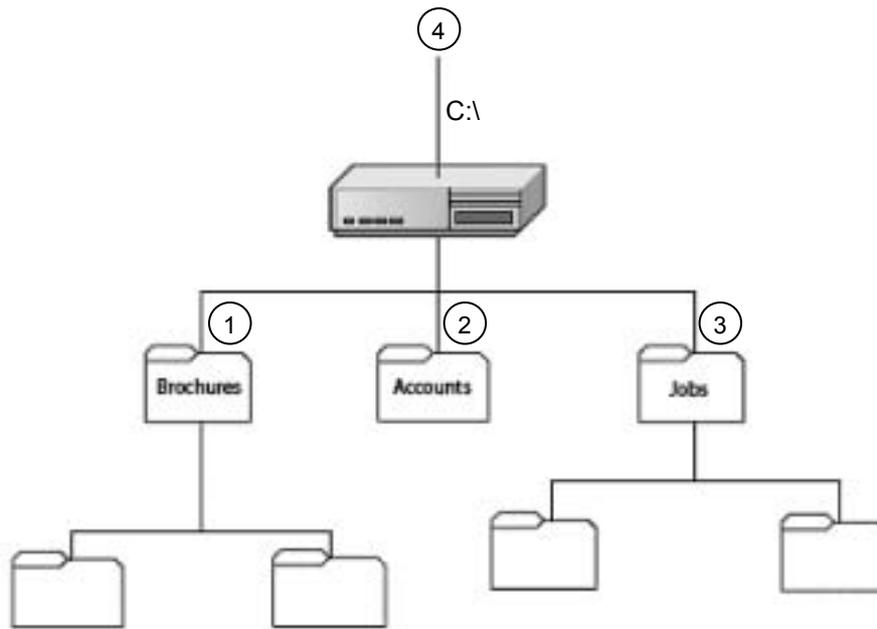
c. Give **one** reason why.

d. How could the company make sure that the staff who need to use macros and templates are aware of their use?

1 + 1 + 1 + 1 = 4 marks

Question 7

The following shows part of a directory structure that Ace Designs uses.



- a. Identify the root directory in the diagram above by drawing a circle around the corresponding number below.

1 2 3 4

- b. Refer to the case study to complete the directory structure that Trinh uses under the Brochures folder. Write suitable folder names in the relevant blank boxes in the diagram above.

The Jobs folder contains the company database.

- c. Describe two ways to make the database more accessible to users.

1. _____

2. _____

1 + 2 + 2 = 5 marks

Total 20 marks