

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

A mouse wrist rest, an ergonomic keyboard and an ergonomic adjustable chair are some items used to

- A. add to the poor morale of many PC users.
- B. reduce user errors, fatigue and discomfort when using PCs.
- C. reduce the cost when employing support staff for the Help Desk.
- D. provide economical and competitive standards for many PC users.

Question 2

Amelia wishes to scan some photos to email them to her friends. The problem is that she does not know how to scan.

What type of documentation will help Amelia?

- A. user manual
- B. drivers manual
- C. installation manual
- D. technical reference manual

Question 3

A company wishes to upgrade their existing commercially available accounting system. Their IT manager has found a consultant who could customise the company's existing accounting system and provide full support, as well as training for staff, at a minimal cost.

Company management is most likely to

- A. wait until the end of the financial year before upgrading.
- B. buy better hardware before upgrading their existing system.
- C. approve the upgrade to their existing system to be customised.
- D. evaluate several different systems before making a decision to upgrade.

Question 4

After installing a new email system at IGM Insurance Company, you are required to collect staff feedback on the new system and to respond to any problems raised by staff before you can be paid. Only 5 out of 63 staff return the 4-page survey forms and some staff have complained that the survey was too long. The senior manager will not permit any more surveys as they stop staff doing their work. An appropriate alternative way to get the feedback you need would be to

- A. organise interviews with individuals or a small group.
- B. send an email that provides rewards for returning existing survey forms.
- C. send an email with five questions to staff at their home email addresses.
- D. employ an observer to watch people use the product and report on any specific problems.

Question 5

The table below shows part of a Help Desk log for a company called SurfWax Pty Ltd.

Date	Time	Name	Problem	What was done	Outcome
20/11/2006	09:25	Sofie	Complained that she cannot log onto network	Reset network password	Still could not log in
20/11/2006	09:28	Bert	Error message received as 'domain SurfWax not found'	Pinged the main SurfWax server	No response

Combining the information from both log entries, the best explanation for the problem is

- A. the main network server is down.
- B. the users have forgotten their passwords.
- C. there is a virus on the network server or workstations.
- D. a network cable has been unplugged from Bert's computer.

Question 6

Rosa notices that her computer keeps rebooting every 5 minutes by itself. This happens in the morning half an hour after she first turns the computer on.

The **most** likely cause of the problem is

- A. a faulty video card.
- B. the reset button is sticky.
- C. the CPU fan has stopped working.
- D. the RAM on the motherboard is faulty.

Question 7

Which one of the following is **not** an example of user documentation?

- A. data dictionary
- B. online tutorial
- C. quick reference card
- D. hardware training manual

Question 8

Glen has installed some new software on a client's PC. A few days after the installation he emails an evaluation questionnaire to the client and asks them to complete and return the questionnaire within the next week.

The most likely reason for this would be that he

- A. requires the client's contact details for his database.
- B. needs to meet his quota of questionnaires for the week.
- C. needs to confirm that the software has been installed into the correct folder.
- D. needs to confirm that the software meets all of the user's requirements.

Question 9

A company has recently upgraded its financial software package. Erica works with the company's Help Desk team. After discussing the software with staff, she discovers that a large number of people are not using some of the advanced features of the software that would save them time and effort.

What should she do?

- A. tell the staff to use the Help menu that is included in the package
- B. nothing, most of the staff probably would not use the new features
- C. arrange for a training needs analysis survey and conduct some appropriate training
- D. show a few people how to use the new features and hope that they will show other people

Question 10

Shellie uses a simple database file to store records of training courses attended by staff. The training courses are classified as Occupational Health and Safety (OH&S) or General courses. The structure of the database table is made up of the following fields.

- StaffID
- Family name
- Given names
- Position
- Phone extension
- OH&S Training Courses
- General Training Courses

The last two fields contain the names of training courses and the dates on which particular staff members have attended. The data is in one long list separated by commas.

How would you get a list of all staff with First Aid qualifications?

- A. search for all records with 'First Aid' in the OH&S Training Courses field
- B. search for all fields with 'First Aid' in the OH&S Training Courses record
- C. search for all records with 'First Aid' in the General Training Courses field
- D. search for all records with 'First Aid' in the General Training Courses record

Question 11

Your company makes a full tape backup after work every Friday evening and incremental backups on Monday, Tuesday, Wednesday and Thursday evenings. You arrive at work Wednesday morning to find the hard drive has failed totally on the company file server and all the files on the drive are lost.

What do you need to do to recover the files?

- A. restore only Friday's full backup
- B. restore Friday's full backup and Tuesday's incremental backup
- C. restore Friday's full backup and Wednesday's incremental backup
- D. restore Friday's full backup and both Monday's and Tuesday's incremental backups

Question 12

A client has a problem with their file server. The keyboard lights occasionally flash on and off and then the file server reboots.

To assist you in solving the problem, you will need to

- A. dismantle and clean the keyboard.
- B. read the technical documentation for the server.
- C. read the user documentation for all the server applications.
- D. use the system tools for the operating system that is currently running on the server.

Question 13

Modern computer operating systems still provide access to a command line interface.

This is most likely so that

- A. computer experts will not complain.
- B. technicians can confuse ordinary users.
- C. technicians are able to troubleshoot problems.
- D. interested users can learn an old type of code-based interface.

Question 14

Which one of the following file types is a non-compressed format?

- A. jpg
- B. zip
- C. mp3
- D. txt

Question 15

Colin tries to log in on his computer at work but he gets the following message.

The local domain server cannot be contacted.

Other users have had no problem logging onto the system on their computers.

The cause of the problem is most likely that

- A. the <Caps Lock> key is in the wrong position.
- B. Colin's computer network cable is loose or unplugged.
- C. the local domain server is disconnected from the network.
- D. Colin needs to get his login code reactivated by the IT department as it has been disabled.

Question 16

The following calls come into your Help Desk in rapid succession.

- i. help a user to sort data in their spreadsheet for tomorrow's report to the Board of Directors
- ii. set up the data projector and laptop for the CEO's presentation that starts in one hour
- iii. connect the new colour printer to the CEO's secretary's PC so she can print the brochures for a mail-out that is due to go in the post in one hour

The **best** way to prioritise the calls would be

- A. ii, i then iii.
- B. iii, ii then i.
- C. ii, iii then i.
- D. iii, i then ii.

Question 17

You are asked to write some documentation. It must be in 12 point Times New Roman, have single line spacing, contain a header and footer, headings to be bolded and the left margin to be 2.5 cm.

This requirement is an example of

- A. a writing documentation template.
- B. writing documentation to a standard.
- C. writing documentation for the audience.
- D. writing documentation so it is understood.

Question 18

Which one of the following should **not** be included in a template?

- A. structure of a document
- B. format of a document
- C. standard text
- D. fixed date

Question 19

Carmel needs to send letters to 50 clients. The letters need to be personalised with the clients' details and must be sent in tonight's mail.

The **best** advanced feature for completing this task would be to

- A. use an auto filter in a spreadsheet.
- B. use a query analysis using database software.
- C. use mail merge in a word processor from a data source.
- D. make 50 copies of the word processed letter and manually edit the clients' details.

Question 20

A folder called 'Maintenance reports' has the following permissions set for User Groups 1, 2 and 3.

Folder permissions	Group membership
Group 1 has 'Read only'	User A is in group 1 & 3
Group 2 has 'Read Write'	User B is in group 2 & 3
Group 3 has 'No access'	User C is in group 1 only
	User D is in no groups

If the group with the highest level of access permissions overrides all other groups that a user belongs to, which user can change the files in the 'Maintenance reports' folder?

- A. User A
- B. User B
- C. User C
- D. User D

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

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

Question 1

Lorraine has a laptop computer because she frequently has to travel to meetings in distant towns. However, she has found the laptop keyboard to be uncomfortable when typing because the keys are smaller and closer together.

- a. What would you recommend to improve the comfort for this highly mobile computer user?

- b. Suggest why it would be important to improve Lorraine's typing comfort.

1 + 1 = 2 marks

Question 2

An angry client calls the Help Desk asking you to fix his problem. You interpret from what he says that the printer has jammed for the fourth time in a row.

What is the best way to handle this call?

2 marks

Question 3

You have created and supplied a user manual for a software application for one of your clients. The client has raised a number of concerns about the manual supplied.

The client did not sign off on the user manual.

- a. Why would the client need to sign off on the user manual?

One instruction from the user manual is shown below.

If the numbers in subsection A, part B are not equal to the numbers in subsection C, part A, then proceed to section 4 and delete column 2 from the list and add to column 4 immediately prior to entering the numbers in section 2, otherwise the amount of GST charged will need to be calculated using numbers in table 21.

- b. Give one reason why the client would have difficulty with this instruction.

1 + 1 = 2 marks

Question 4

From the following list, select **two** items that would be part of the **minimum** requirements when installing the latest operating system on the latest desktop PC.

Tick **only two** of the boxes below to indicate your selections.

- network card
- CD/DVD drive
- wireless mouse
- floppy disk drive
- Web enabled keyboard
- amount of system RAM
- available hard disk drive space

2 marks

Question 5

A new server called 'NewPrintServer' has been installed at ACME Corporation. The old print server called 'PrintServer' is switched off and disconnected from the network. The next morning, the Help Desk gets many complaints from users who cannot print.

- a. Suggest a reason for the users not being able to print.

- b. Explain how you could fix this problem.

1 + 1 = 2 marks

Question 6

You receive the following error message on your screen while using your PC.

'Out of range error in line #1654'

Does the message indicate a software or a hardware problem? Explain your answer.

2 marks

Question 7

David is a veterinarian who has a number of dairy farmers among his long-term clients. David regularly visits clients to check on the health of their dairy cattle. For each cow, David records its milk production statistics and makes notes for its medical record on a preprinted form. Each night he enters the data into a file on his home computer. As David’s client base has grown, record keeping in this way has become time consuming. A friend in another district has been using a hand-held device (Figure 1) to record data on site. He then uploads it when he gets back to his office.



Figure 1 – Hand-held device

David has asked you for some advice on finding a suitable hand-held device and setting it up for his data recording.

- a. Suggest **one** source that David could use to find information about suitable hand-held devices.

After considering the hand-held devices available, the choice has come down to two options. Their specifications are given below.

<p>Hand-held device A</p> <p>312 MHz processor 320 × 480 transfective TFT colour touch screen 128 MB Flash memory Operating system supports common office software 3.0 mega pixel camera SD card slot with bonus 512 MB card 2 built-in games MP3 player Mix and match case covers Voice recognition software MAC and PC compatible Office productivity package included Docking device and synchronisation software 186.7 g \$749</p>	<p>Hand-held device B</p> <p>312 MHz processor 128 MB Flash memory 2 GB hard drive Operating system supports common office software MAC and PC compatible Built-in Bluetooth wireless connection Internet connectivity GPS capability In-car cradle with hands-free pack 1.3 mega pixel camera Built-in mic and speakers Smartphone with polyphonic ring tones Office productivity package included 192.8 g \$929</p>
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- b. David decided to choose device B. Give **two** reasons to justify his selection based on the information provided above.

1 + 2 = 3 marks

Question 8

A large company specialises in Help Desk support for external clients. They have many staff trained for Level 1 support which involves answering calls and trying to solve initial problems. The company also has Level 2 support with more experienced technicians and Level 3 support, including specialist engineers who are experts in their field. Part of the Help Desk procedure is to get regular feedback from clients to assist in providing a quality service.

- a. A Level 1 support person told a client that the problem needed to be escalated. What does this mean?

- b. State **two** ways in which the company could get feedback from their clients.

- c. What is benchmarking and why is it important for a large Help Desk support company?

1 + 2 + 2 = 5 marks

Question 9

Your company intends to purchase a major new piece of software to process all of its inventory control data. Below are four criteria that you could use to help decide which product to buy. Give a reason for using each of the criteria listed.

Criteria for software selection	Reason for inclusion in list
1. Operating system requirements	
2. Training available	
3. Support provisions	
4. User or special interest groups	

4 marks

SECTION B – continued
TURN OVER

Question 10

Dave receives a popular new 3D game for his birthday. Unfortunately, Dave cannot play the game well on his current computer, as it runs very slowly and there is a considerable lag via the Internet for the multi-player component of the game. He notices that his hard disk light flashes a lot, particularly when running the game. The table shows the specifications of Dave’s current computer and the specifications given on the game’s package.

Dave’s computer	Game specifications (minimum)
Pentium 4 3.0 GHz	Pentium 4 2.0 GHz/ AMD Athlon XP 2000+
512 MB RAM	512 MB RAM
Standard SVGA card built in on motherboard – shares 32 MB RAM	3D Video Card 64 MB (DirectX9.0c / OpenGL 2.0 card)
52× speed CD ROM drive	8× speed CD ROM drive
20 GB IDE 7200 rpm (5 GB free)	2.8 GB free hard disk space (plus 400 MB for swap file)
16-bit sound card	16-bit sound card
56 K dial-up Internet connection	Internet connection

List **two** possible upgrades, including a reason for each upgrade, that Dave could make to enable smoother game play.

Upgrade 1 _____

Reason 1 _____

Upgrade 2 _____

Reason 2 _____

4 marks

Question 11

To improve security an IT manager has implemented a policy that all desktop computers have a password protected screen saver that activates after five minutes of no user input.

a. How would this policy improve security?

b. Some staff are complaining about the screen saver. Suggest why.

c. How would you modify the settings to minimise staff concerns?

1 + 1 + 1 = 3 marks

Question 12

When a DVD writer was installed on Sally's computer, the additional software that came with it was not installed as her hard disk drive had limited free space. As she burnt her first DVD she got a message that said 'buffer underrun error' and the resulting DVD would not work.

Explain why there was an error.

2 marks

Question 13

You send an email to a client at Company A but it bounces back with a message indicating that it is probably infected by a virus. The email had only one attachment: 'Minutes 14 Oct 2006.doc.doc'. When you sent the email it was scanned by your antivirus program and given the all clear.

- a. Why would the system at Company A send this message back to you?

The following week you send an email with an attachment called 'BoardPresentationNov06.ppt' to a client at Company B with the priority 'High'. A while later you receive a message that the email is 'undeliverable' as the attachment is over 3 MB in size.

- b. Explain what you could do to overcome this problem.

1 + 1 = 2 marks

Question 14

A utility program that can be used on a PC is called DEFRAG.

- a. What does DEFRAG do when it is run?

- b. Describe **two** situations when it would be helpful to run DEFRAG.

1 + 2 = 3 marks

Question 15

A large company that employs over five hundred people Australia wide is changing over their text-based database system into a new GUI-based database system.

- a. Data files need to be converted from the old system to the new one. What is the most important thing to be done after the conversion process?

- b. Give **one** advantage for migrating to a GUI-based database system.

- c. Management has noticed that there is some user resistance to the new system. What could the company do to overcome user resistance?

- d. When is the best time to install the new system?

1 + 1 + 1 + 1 = 4 marks

Question 16

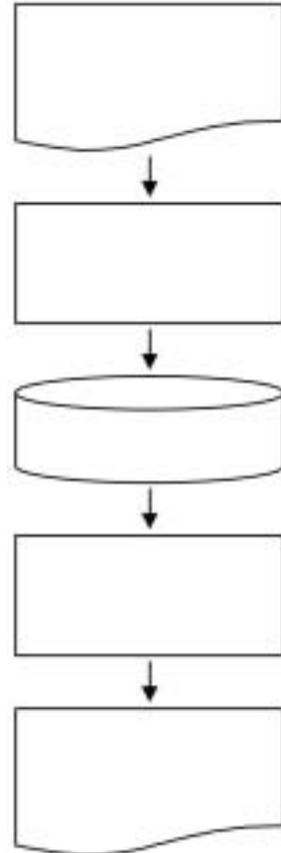
ACME Music sells the latest CD music to its customers. George works at the front counter and is responsible for CD sales. When a customer approaches George to buy a CD, he scans in the barcode of the CD, the computer calculates the cost, and then George prints out an invoice for the customer.

- a. Select from the following numbered labels to create a system flow chart for what George does.

Write the number for each label in the appropriate box in the diagram.

Labels

1. Scan CD barcode into computer
2. Customer invoice
3. Print an invoice for the customer
4. Music sales file
5. Barcode on CD



- b. Give **two** specific pieces of information that are stored in the CD barcode.

1. _____

2. _____

- c. A data dictionary is shown in the table below. A data dictionary lists the data elements in a system and their properties.

Enter the **two** specific pieces of information that could be stored for the music sales file into the data element column below. Enter the appropriate length and type for the data elements you have chosen.

Data element	Length	Type	Data store (database)
			music sales file
			music sales file

2 + 2 + 2 = 6 marks

Question 17

Richard has been sent a complaint that claims he has passed the confidential email address of one person on to ten other people when he sent a bulk email with eleven addresses in the 'To' field.

- a. Explain how he or his company could be considered to have broken the law by doing this.

- b. How could he prevent this occurring again?

1 + 1 = 2 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.

BooketTix Entertainment is a company that distributes tickets for entertainment events ranging from rock concerts to sporting events. It currently employs fifty people but wishes to expand its operations Australia wide.

Simone, the managing director, carries out the day-to-day running of the business. She needs weekly management reports from the company's booking database to help her make decisions. Sometimes Simone prints these reports and at other times the reports are printed by Rhonda, her personal assistant. The database has a complicated menu system and Simone is not always sure what preliminary information to key in, so sometimes the wrong report is printed.

Michael is one of the booking operators who answers the phone when a customer rings to book an event. He enters the customer's name, address, phone number and credit card details into the booking database. He then allocates seats at the venue and enters the number of tickets required. Michael prints out the tickets, hand writes the customer's details on an envelope, and then posts out the tickets at the end of the day.

Thao is the company accountant and she runs the Accounts Department. Thao does the company payroll on a spreadsheet and then she converts it to a text file. It is uploaded directly to the bank via a modem using the bank's software. Thao sometimes has difficulty using the spreadsheet, as she has to scroll left and right to enter data for each employee. She occasionally keys in the wrong number of hours worked for an employee. The bank also calls her frequently about her file being corrupted or about the file not being in the right format. This has caused staff to receive their salaries up to two days late.

Ahmed works in the Accounts Department. One of his jobs is to send formal invoices to customers for the tickets they have bought. This does not happen frequently, but some corporate customers request the invoice so that they can claim it as a business expense. Ahmed usually just types up an invoice from memory using a word processor. Thao has noticed that the invoices sent often look different and that Ahmed is not aware of, or has not been using, the Standards Guide for all company correspondence.

Simone has requested your services as an IT consultant. She wishes to cut costs by improving the efficiency of staff work procedures. She also has plans to make an Internet-based booking system available for her customers.

Question 1

How would using a template improve Ahmed's invoices?

1 mark

Question 2

Simone has requested a meeting with you to discuss the details of macros and templates to be developed.

The first thing you do with Simone is to analyse the requirements of the macros and templates to be developed.

a. Explain what is meant by 'analyse the requirements'.

b. Why do you need to get Simone's approval before creating your macros and templates on the computer?

1 + 1 = 2 marks

Question 3

Describe **two** macros that could help Simone print out her management reports more efficiently.

Macro 1 _____

Macro 2 _____

2 marks

Question 4

There are two ways of making it easier to send tickets to customers.

- Write a mail merge macro so that customer details are printed on the envelope and then the tickets are enclosed and sent in the mail.
- Write a macro to send the tickets automatically via email, where the customer must print the ticket with a good quality printer in order for the barcode scanner to work at the venue.

Choose **one** method and describe **one** advantage and **one** disadvantage.

2 marks

SECTION C – continued
TURN OVER

Question 5

An image of an invoice produced by Ahmed is shown below for the customer, CustomRacing.

- a. Write the necessary details on the invoice below (you should make up some sample details).

<p>BooketTix Entertainment Tax Invoice</p>

- b. How would you make sure that all staff who need to create invoices have access to this document?

- c. Why would you provide the Help Desk with documentation for this invoice for future support?

2 + 1 + 1 = 4 marks

Question 6

- a. Without using macros, how could Thao be assisted to make better use of her spreadsheet?

The spreadsheet contains the following information.

- payrate – the amount the employee earns in dollars per hour
- employee_pay – the total amount of pay the employee earns
- normal_time – flag that represents ordinary hours worked
- time_and_half – flag that represents hours worked at one and a half times the normal_time
- double_time – flag that represents hours worked at two times the normal_time
- normal_hours_worked – amount of hours worked at normal_time
- time_and_half_hours_worked – amount of hours worked at time_and_half
- double_time_hours_worked – amount of hours worked at double_time

A payroll macro has been designed to assist Thao. Part of the pseudocode for the macro is listed below.

1. If payrate = normal_time then
2. employee_pay = payrate * normal_hours_worked * 1
3. end if
- 4.
- 5.
- 6.
7. If payrate = double_time then
8. employee_pay = employee_pay + payrate * double_time_hours_worked * 2
9. end if

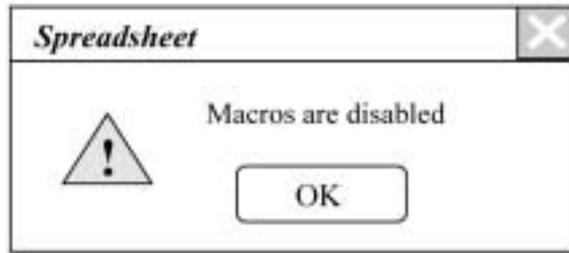
- b. The code is missing for lines 4, 5 and 6. Write the correct lines of pseudocode for these missing lines below to calculate the employee_pay if they have worked time_and_half hours.

4. _____

5. _____

6. _____

When Thao opens the spreadsheet with this macro, the following message appears.



- c. Explain why this error message has appeared on the screen, given that the macros have **not** been turned off.

1 + 2 + 1 = 4 marks

Question 7

One of the future directions of the business is to provide an Internet-based booking system for its customers.

- a. Apart from the name, address and phone number, give **one** other essential piece of information that would be required from a customer wanting to book an event.

- b. Draw a version of a web page form that would enable customers to place their bookings via the Internet. Include a method of navigation and an indication that the site is secure.



- c. How would you ensure that there was a consistent layout and navigation scheme for the web page?

- d. What type of client documentation or support would you provide for the web page?

1 + 2 + 1 + 1 = 5 marks

Total 20 marks