**Victorian Certificate of Education
2012**

STUDENT NUMBER

Letter

Figures

Words

VCE VET INFORMATION TECHNOLOGY
Written examination

Thursday 15 November 2012

**Reading time: 9.00 am to 9.15 am (15 minutes)
Writing time: 9.15 am to 10.45 am (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	21	21	70
			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

The main aim of an ergonomic keyboard is to

A.   improve user morale.

B.   improve user comfort.

C.   provide a modern workplace.

D.   reduce hardware maintenance.

Question 2

Multi-tasking operating systems

A.   can run a number of programs and tasks at the same time.

B.   run advanced algorithms for scheduling the resources of the CPU.

C.   connect and control both onboard and peripheral hardware devices.

D.   are used to perform regular maintenance tasks without user intervention.

Question 3

Which of the following Help Desk problems needs to be escalated?

A.   Sue has lost a spreadsheet file.

B.   Roger cannot save a document file.

C.   Colin's new printer has broken down.

D.   Patrick cannot send an attachment in an email.

Question 4

The most likely reason why virus protection software did not detect a virus on Maidi's computer is because

A.   a new virus had appeared.

B.   the virus definitions were up to date.

C.   the computer was connected to the internet.

D.   the computer was not connected to the internet.

Question 5

Which of these processes is the **last** one undertaken when preparing user documentation?

A.   review of documentation by users

B.   review of documentation standards

C.   review of documentation by team leaders

D.   review of documentation by software author

Question 6

The best reason for a Help Desk to store its information using a database is that

A.   the data can be added up easily.

B.   everyone has database software.

C.   a database is too complicated to hack.

D.   the data can be reported using customised reports.

Question 7

An operating system is a suite of programs that provides a computer user with

A.   games, a web browser, wallpaper, instant messaging and photo programs.

B.   word processing, spreadsheet, database, mail and slide presentation programs.

C.   assistance with logging off and closing programs and files, and basic user documentation.

D.   an interface with the computer, and management of both onboard resources and peripheral devices.

Question 8

Which group of external computer connectors is normally used for both input and output?

Question 9

The company Abdollah works for has a good policy and procedures manual for Occupational Health and Safety (OH&S) that has been issued to every employee. Many of his workmates are not following basic OH&S practices.

Abdollah's best action is to discuss his concerns with

A.   the OH&S Manager.

B.   his union representative.

C.   a friend, who is a journalist.

D.   the Human Resource Manager.

Question 10

Which of the following lists contains only appropriate items to be included in a template for business letters?

A.

format

standard text

fixed date

recipient's address

B.

structure

standard text

signature

recipient's address

C.

format

standard text

headings

signature

D.

structure

format

fixed date

headings

Question 11

Stephanie, an IT student, received a suspicious email and asked her friends about it. One of them said, 'I've heard of that one and it's a hoax'.

What is the best way for Stephanie to confirm whether or not it is a hoax?

A. Ask her friend for more information.

B. Search the websites of antivirus companies.

C. Do an internet search using the phrase 'virus hoax'.

D. Visit the local computer shop and ask the sales staff.

Question 12

Tamara works at the Help Desk of a software retailer. She is designing an evaluation form for the Help Desk. Her manager provides a number of possible topics that could be added to the form.

Which is the best list of topics?

A.

nature of the problem

quality of telephone support

number of follow-up software purchases

ability of the Help Desk to diagnose problems

B.

quality of telephone support

time taken to provide a solution

ability of the Help Desk to solve problems

ability of the Help Desk to diagnose problems

C.

nature of the problem

time taken to provide a solution

impact of the problem on user's productivity

ability of the Help Desk to diagnose problems

D.

nature of the problem

number of follow-up software purchases

ability of the Help Desk to solve problems

impact of the problem on user's productivity

Question 13

An operating system displays a dialogue box with the message 'virtual memory low'. The operating system has the virtual memory set to 'auto size'.

The most probable cause of this message is

A. insufficient ROM.

B. insufficient RAM.

C. over-clocked CPU speed.

D. low free space on the hard disk.

Question 14

During start-up, your computer reports a potential hard drive problem.

Which tool is used to check the integrity of the hard drive?

A. drive options

B. a disk scanner

C. a disk manager

D. a disk partitioner

Question 15

Open source Linux software was downloaded. One of the system requirements is 1 GB RAM, as a minimum, with 2 GB RAM recommended. You have installed Linux on a machine that has 1 GB RAM.

Which is the best description of what will happen when the computer is being used?

A. There will be no room to save the files being worked on.

B. The computer will crash while you are trying to load the operating system.

C. The operating system will crash if a peripheral device is attached to the computer.

D. There will be a lot of hard disk activity and commands will run slower than expected.

Question 16

Which sequence describing part of the main 'boot' steps is correct?

A. motherboard checks power and signals CPU, CPU contacts BIOS, BIOS locates MBR, OS loads and performs hardware checks

B. BIOS locates MBR, motherboard checks power and signals CPU, CPU contacts BIOS, OS loads and performs hardware checks

C. OS loads and performs hardware checks, motherboard checks power and signals CPU, CPU contacts BIOS, BIOS locates MBR

D. motherboard checks power and signals CPU, OS loads and performs hardware checks, CPU contacts BIOS, BIOS locates MBR

Question 17

You are designing a new style guide for the content of user documentation.

Which list includes only items relevant to the style guide?

A.

    common misspellings

    font specifications (name, size and colour)

    headers, footers (content and layout)

    illustration software to be used

    writing time (pages per week)

B.

    common misspellings

    font specifications (name, size and colour)

    headers, footers (content and layout)

    margin specifications

    standard industry abbreviations

C.

    common misspellings

    document specifications (length, single or double sided)

    margin specifications

    paper specifications (colour, size and weight)

    standard industry abbreviations

D.

    font specifications (name, size and colour)

    illustration software to be used

    margin specifications

    standard industry abbreviations

    word processing software and macros to be used

Question 18

Joseph is having problems accessing the company's wireless network using his new laptop at his usual workstation. Joseph is the only person experiencing this problem.

The Help Desk took the following actions.

- reloaded Joseph's browser software
- reset the network routers and switches
- asked Joseph to use his laptop at a different workstation
- asked Joseph to use another, similar laptop at his workstation

None of these enabled Joseph to access the network.

The Help Desk also asked Helen to use her laptop at Joseph's workstation. It worked perfectly.

What is the most likely cause of Joseph's problem?

A. localised radio interference

B. a faulty cable at Joseph's workstation

C. a faulty network interface in Joseph's computer

D. Joseph needs more training in using the network

Question 19

A business is switching to a new software package, which must be in use in two weeks. One hundred and twenty staff need to be trained before they can use the new software.

How can this be done in time, with minimal cost?

A. Five groups of 24 staff will go to a nearby professional training venue for a full day of training. The training covers all the basics of the software, with an overview of some of the more advanced skills required. The training can start in one week and will run from Monday to Friday of that week.

B. Five groups of 24 staff will go to a nearby professional training venue for a full day of training. The training covers all the basics of the software and then covers how the business will use the software. The training can start in two weeks and will run from Monday to Friday of that week.

C. All staff will go to a professional training venue 120 km away. The business will provide buses to get everyone there. The venue will split the staff into four groups and train all of them in one day. The training covers all the basics of the software and then covers how the business will use the software. The training can start in one week and will be held on the Tuesday of that week.

D. Four in-house training staff will go to a nearby professional training venue tomorrow for a two-day in-depth course. The training covers all the basics as well as the advanced skills required. These four staff members will then run in-house training for the rest of the staff, in groups of six, for half a day. There will be two groups in training at once, covering basic skills and focusing only on how they apply to the business's systems.

Question 20

Which of the following lists contains the best advice to reduce glare on a computer monitor?

A. Use optical glass glare filters.

Centre the monitor directly in front of you.

Place the monitor at a right angle to the window.

Adjust the monitor's angle to minimise reflection from overhead lights.

B. Centre the monitor directly in front of you.

Sit at least an arm's length away from the screen.

Place the monitor at a right angle to the window.

Adjust curtains or blinds to keep light off the monitor.

C. Use optical glass glare filters.

Place the monitor at a right angle to the window.

Adjust curtains or blinds to keep light off the monitor.

Adjust the monitor's angle to minimise reflection from overhead lights.

D. Use optical glass glare filters.

Sit at least an arm's length away from the screen.

Adjust curtains or blinds to keep light off the monitor.

Adjust the monitor's angle to minimise reflection from overhead lights.

END OF SECTION A
TURN OVER

SECTION B – Short answer questions

Instructions for Section B

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

Question 1

After an operating system is installed, the operating system finds and installs internal and peripheral hardware.

a. Name the groups of programs needed to allow an operating system to run hardware components.

_____

1 mark

b. Sometimes the operating system cannot locate the necessary programs and, therefore, cannot automatically install the hardware in question.

State two sources that provide access to these programs.

1. _____

2. _____

2 marks

Question 2

When Albert tried to open a file on his local hard drive, his antivirus program detected a virus and reported that it could not clean the virus from the infected file.

a. What is the first thing Albert should do?

_____

1 mark

b. What should be done with the infected file?

_____

1 mark

Question 3

Help Desk staff use call logs to record their tasks.

List two other documents that Help Desk staff use to undertake and complete tasks.

1. _____

2. _____

2 marks

Question 4

Alice is creating the Safety Maps for your workplace.

Explain why each of the items listed below needs to be included on the Safety Map.

• location of first-aid equipment and fire extinguishers (including the type of extinguisher)

_____

• evacuation routes and alternative assembly areas

_____

• internal and external emergency contact numbers

_____

3 marks

Question 5

Shenae's company receives several hundred personal computers each month. The company installs proprietary software on these computers before shipping them to clients. Shenae noticed Travis, a new employee in her team, using incorrect procedures to lift and move these computers. Shenae immediately gives Travis one-on-one training.

Describe **two** specific procedures Shenae should include in this training.

_____

_____

_____

_____

2 marks

Question 6

The following feedback was given by Help Desk clients after receiving support.

☐   The Help Desk operator was abrupt and stand-offish.

☐   I was told the problem would be fixed in 20 minutes. It actually took two hours to fix!

☐   Some of the words used were too complicated for me to understand.

Select one of these comments by ticking (✓) the relevant box and describe how the Help Desk can improve its performance in that area.

_____

_____

1 mark

Question 7

An accountant has hired you to look into the transfer of a variety of in-house and external hard-copy information and documentation to online electronic information and documentation.

a. Advise the accountant on the best way to produce the online electronic information and documentation.

_____

_____

_____

_____

2 marks

b. Advise the accountant on **two** advantages of migrating information and documentation in this way.

_____

_____

_____

_____

2 marks

Question 8

Sachin operates a local DVD rental business. Data about new customers, rentals and DVD releases is added to his database daily. Sachin wants to protect the business's data. He purchases an external hard drive, on which he will back up the data.

a. Describe one advantage the external hard drive provides for backups.

_____

_____

1 mark

b. Recommend a safe location for the hard drive and explain your recommendation.

_____

_____

_____

1 mark

c. Recommend a schedule for the data backup and explain your recommendation.

_____

_____

_____

_____

2 marks

Question 9

New Wave Limited recently upgraded to new computers with a new operating system. All the staff attended a group training session. Ivy works at the Help Desk for New Wave. She plans to evaluate the effectiveness of the training using a feedback form.

After Ivy has designed the feedback form, list three things that she will need to do to complete the evaluation.

1. _____

2. _____

3. _____

3 marks

Question 10

As programs are uninstalled and files are deleted, a computer's hard drive develops gaps. As new files and programs are added, the gaps are filled in.

a. What is this process called?

_____

1 mark

b. Explain why this causes a problem for a computer.

_____

_____

_____

_____

2 marks

c. Name a tool that overcomes this problem and describe its action.

_____

_____

_____

_____

2 marks

Question 11

Below is a list of functions that can be performed by software installed on a computer.

Tick (✓) **two** boxes indicating items that are completed by a computer's operating system.

☐ virus checking

☐ malware protection

☐ basic word processing

☐ saving a file to the hard disk

☐ version control for files on the computer

☐ scheduling the order in which tasks are completed

2 marks

Question 12

The Help Desk has decided to use a database to record problems reported to it.

List nine fields needed in the database.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

3 marks

Question 13

A company is reviewing its document standards.

a. Explain the purpose of a document standard.

_____

1 mark

b. Why should a company review its document standards?

_____

1 mark

c. What are industry standards?

_____

1 mark

d. Current industry standards have changed and the company's standards need to be upgraded.
Tick (✓) the box indicating the most appropriate way to upgrade.

☐ Use the industry standards with no changes.

☐ Start with the industry standards and modify them to fit your needs.

☐ Start with your company's document standards and update them with the industry standards.

☐ Start with another company's document standards and update them with the industry standards.

1 mark

Question 14

Outsourcing technical support to external suppliers is a trend among large technical organisations.

Identify and explain four results (advantages or disadvantages) that may occur from outsourcing technical support.

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

4. _____

_____

_____

4 marks

Question 15

Consider the following environment.

Chair

- cloth covered, with adjustable seat height
- adjustable backrest, including lumbar support
- five-wheel, heavy-duty, plastic castors

Workplace

- polished, hardwood flooring

Describe one Occupational Health and Safety (OH&S) improvement that can be made to this environment.

_____

_____

1 mark

Question 16

The Marie Christine cosmetic company conducts door-to-door sales. The company is considering a change from its current handwritten system of placing orders because of errors caused by the poor handwriting of some staff. It is proposed that sales staff be given laptop computers and battery-operated printers to automate the placement of orders, while still being able to provide clients with a copy of their order.

a. Identify two OH&S issues for the mobile sales staff that may arise as a result of this proposed solution.

1. _____

2. _____

2 marks

b. Suggest a suitable alternative to the proposed solution.

_____

_____

2 marks

c. Give two reasons why your suggested alternative is better than the company's proposed solution.
In your response, include OH&S issues or any other relevant issue.

1. _____

_____

2. _____

_____

2 marks

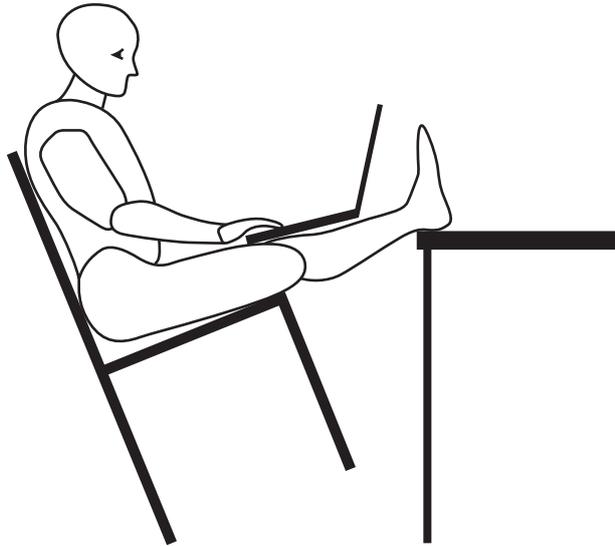**Question 17**

Oscar has a large number of similarly named files. He needs to find the files changed in the last week. Describe a procedure that will quickly check which files were changed recently.

_____

_____

_____

2 marks

Question 18

The diagram below shows a laptop user.

List six OH&S hazards shown in the diagram.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

3 marks

Question 19

Tiffany was contacted by her Help Desk Manager and asked to repair a faulty computer that would not boot. She decided that the Power On Self Test (POST) was unable to produce any beep codes. She plugs in a POST card to assist her.

a.   Where will Tiffany plug in the POST card?

_____

                                                                                                                1 mark

b.   Describe two ways in which the POST card can display the POST codes.

    1. _____

    _____

    2. _____

    _____

                                                                                                                2 marks

c.   Explain how Tiffany can use the displayed POST codes.

_____

_____

_____

                                                                                                                1 mark

d.   Describe a constraint Tiffany has to consider when using POST cards.

_____

_____

_____

                                                                                                                1 mark

Question 20

A new training organisation wants to set up a training facility to teach groups of up to 12 adult students how to use word processing and spreadsheet software. You have been asked to advise the organisation on all aspects relating to the training areas of this facility.

a. List and explain your OH&S recommendations for this training facility.

_____

_____

_____

_____

_____

_____

_____

_____

_____

3 marks

b. List and explain your hardware, software and other recommendations.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

4 marks

Question 21

On the facing page is a sample page layout. The text shown is often used to give designers an indication of layout, without the need for 'real' text. The layout shown has many design faults.

Identify eight design faults.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

4 marks

Main Heading

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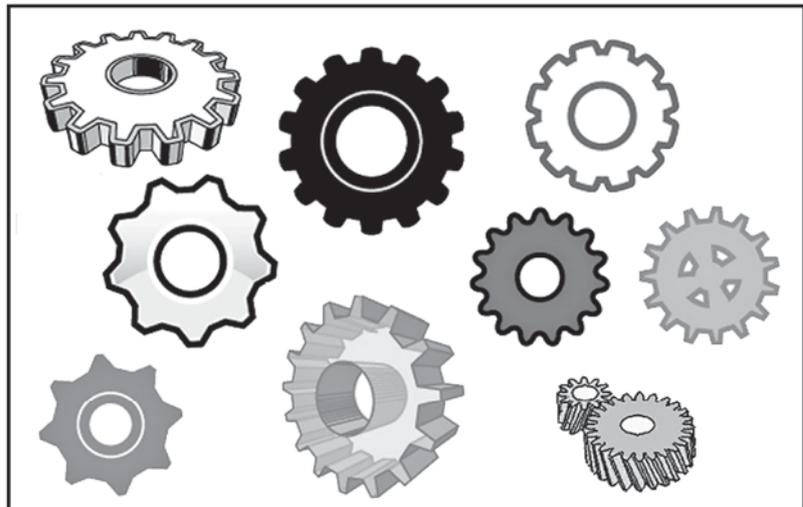
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http://labs.chemist2dio.com/free-vector-gears.php

Figure 1. Good Gear?

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Sub Heading

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Types Of Gears

1. Rack and Pinion
2. Internal Ring
3. Double Helical
4. Face
5. Worm
6. Double Enveloping Worm
8. Hypoid
9. Spiral Bevel
10. Screw Gear (Crossed Helical)

END OF QUESTION AND ANSWER BOOK