

B O A R D O F S T U D I E S
NEW SOUTH WALES

2008

**HIGHER SCHOOL CERTIFICATE
SPECIMEN EXAMINATION**

Information Technology

General Instructions

- Reading time – 5 minutes
- Working time – 2 hours
- Write using black or blue pen
- Board-approved calculators may be used
- Write your Centre Number and Student Number at the top of pages 9, 11, 13 and 15

Total marks – 80

Section I Pages 2–6

15 marks

- Attempt Questions 1–15
- Allow about 15 minutes for this section

Section II Pages 9–16

35 marks

- Attempt Questions 16–19
- Allow about 45 minutes for this section

Section III Pages 17–18

30 marks

- Attempt TWO questions from Questions 20–22
- Allow about 1 hour for this section

Section I

15 marks

Attempt Questions 1–15

Allow about 15 minutes for this section

Use the multiple-choice answer sheet for Questions 1–15.

- 1 Which of the following details about a business should be included on its letterhead?
- (A) Name, address, mission statement, policy and logo
 - (B) Name, address, phone number, fax number and logo
 - (C) Name, mission statement, phone number, fax number and logo
 - (D) Mission statement, address, phone number, fax number and logo
- 2 Gina has identified a serious workplace hazard. She needs to discuss this concern with her workplace supervisor.
- Which of the following forms of communication would be most appropriate in this situation?
- (A) Memo
 - (B) Voicemail
 - (C) Telephone conversation
 - (D) Electronic mail (email)
- 3 Which of the following correctly gives the characteristics of a template and a wizard?
- (A) A template saves time by providing a predesigned layout of documents.
A wizard performs a process automatically.
 - (B) A template saves time by providing a predesigned layout of documents.
A wizard automatically corrects spelling and grammatical errors.
 - (C) A template is a file designed for repeated use.
A wizard is a series of dialogue boxes which guides users through a process by presenting choices.
 - (D) A template is a temporary file which is designed to be overwritten.
A wizard is a series of dialogue boxes which guides users through a process by presenting choices.

- 4 A chart created in a spreadsheet has been inserted into a word-processed document using object linking and embedding.

Which of the following statements is correct?

- (A) Changes in the word-processed document will need to be updated manually in the spreadsheet.
- (B) Changes in the word-processed document will be updated automatically in the spreadsheet.
- (C) Changes in the spreadsheet chart will need to be updated manually in the word-processed document.
- (D) Changes in the spreadsheet chart will be updated automatically in the word-processed document.

- 5 An operating system is to be installed onto a new computer workstation containing an unformatted hard disk. The files needed for the software installation are stored on a CD-ROM.

Which of the following is most likely to describe the process of installing this software?

- (A) Write-protecting the CD-ROM and running the install program
- (B) Copying all files from the CD-ROM to the computer's hard disk
- (C) Booting the computer from the CD-ROM and following the prompts
- (D) Copying only executable files from the CD-ROM onto the computer's hard disk

- 6 What advantage do generic printer drivers have over vendor printer drivers?

- (A) They are cheaper than vendor printer drivers.
- (B) They provide more features than vendor printer drivers.
- (C) They are often included within the operating system software.
- (D) They are specifically written for the printer you are installing.

- 7 An employee has installed an unlicensed operating system on their workstation.

Which laws have the employee's organisation breached?

- (A) Copyright
- (B) Software piracy
- (C) Enterprise agreement
- (D) Occupational health and safety

- 8** Your supervisor is working on a quarterly financial report using a standard database package. While she has the file open, you open the same file.

Which of the following statements is always true?

- (A) The database file that you are working on cannot be saved.
 - (B) Your supervisor will not be able to save changes to the database file while you are working on your copy.
 - (C) The changes that you make to your copy of the database will automatically appear on your supervisor's database file.
 - (D) The changes you make can be saved, provided that the file is stored in a different location from your supervisor's.
- 9** Which of the following is NOT a reason for setting a password on a computer?
- (A) To limit access to the operating system
 - (B) To manage access to peripheral devices
 - (C) To eliminate the risk of the computer being stolen
 - (D) To give access to specific resources on a computer
- 10** After briefly accessing an internet site, Chris notices that the computer performance dramatically slows.

Which of the following procedures should Chris perform first to determine the possible cause of the problem?

- (A) Scan for computer viruses
- (B) Check computer applications
- (C) Run the defragment utility
- (D) Remove all peripheral devices

- 11 Look at the formatting of the text in the box.

This is a paragraph of text that is formatted in a particular style. This paragraph contains four short sentences. This is the third sentence in the paragraph. This is the fourth and final sentence in the paragraph.

What type of paragraph formatting has been applied?

- (A) A hanging indent
 - (B) Fully-justified text
 - (C) A first-line indent
 - (D) Strike-through text
- 12 The following is an extract from a customer database table.

<i>First Name</i>	<i>Last Name</i>	<i>Address</i>
Adam	Jackson	23 High St
William	Ayoub	8 Windy Ave
Stephen	Jackson	1006 Long Rd
Zachary	Ayoub	214 Main Ave

If the records shown were sorted in ascending order by last name then first name, which customer's record would be displayed first?

- (A) William Ayoub
 - (B) Adam Jackson
 - (C) Stephen Jackson
 - (D) Zachary Ayoub
- 13 Which of the following actions could aid in the prevention of occupational overuse syndrome?
- (A) Improving the lighting
 - (B) Changing work routines
 - (C) Improving the ventilation
 - (D) Keeping the back straight when lifting

- 14** Shobha has returned to her job in a large information technology department following a year's leave to care for her children. She fails to gain a promotion for a job for which she is well-qualified. She is informed that the firm prefers to promote single people as they are more committed to their work.

Which form of discrimination may Shobha have experienced?

- (A) Indirect discrimination on the basis of gender
 - (B) Direct discrimination on the basis of gender
 - (C) Indirect discrimination on the basis of marital status
 - (D) Direct discrimination on the basis of marital status
- 15** Which of the following best describes workers compensation?
- (A) A fixed amount paid to an injured worker as a compulsory saving
 - (B) A fixed amount paid to an injured worker while performing light duties
 - (C) A reimbursement of wages or salary paid to a worker injured at work
 - (D) A reimbursement of sick leave and superannuation paid to an injured worker

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Information Technology

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Centre Number

Section II

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Student Number

35 marks

Attempt Questions 16–19

Allow about 45 minutes for this section

Answer the questions in the spaces provided.

Marks

Question 16 (8 marks)

An IT support company uses a spreadsheet to record all of its customer details. The company wishes to transfer its customer information to a new database. The record below is an example of the information stored in the customer database for one customer.

Ms Nina Trinh, Marketing Manager, Everen Industries Australia,
PO Box 322 Sydney 2001, 92345678, N.Trinh@Everen.com.au

- (a) Apart from adding a unique ID field, how many fields are required in order to effectively store this information in one table? 1

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- (b) The database package is unable to import the spreadsheet data directly.
- Outline a method, other than copying and pasting or retyping the data, that will allow the spreadsheet data to be incorporated into the database. 2

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- (c) Explain ONE advantage of using a database rather than a spreadsheet to store customer details. 2

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Question 16 continues on page 10

Question 16 (continued)

- (d) The company wishes to send a personalised letter to each of the customers on its database. **3**

Outline a process that would enable these letters to be produced in an efficient manner.

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End of Question 16

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Centre Number

Section II (continued)

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Student Number

Marks

Question 17 (9 marks)

- (a) Identify TWO components other than CPU and RAM that would be included as part of a motherboard. **2**

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- (b) Discuss ONE of the basic differences between the use of a command line interface and a graphical user interface. **3**

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- (c) Why might a company choose to change their current arrangement of stand-alone computers to adopt a network structure? **4**

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Centre Number

Section II (continued)

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Student Number

Marks

Question 18 (9 marks)

- (a) What advantages are there in connecting a keyboard to a computer via Bluetooth rather than USB? 2

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- (b) The computer you are using suddenly displays a message about 'low memory'. 3

Define virtual memory and discuss how it can be modified to help minimise the occurrence of such messages.

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- (c) Describe the role of RAM in a computer system and discuss a possible reason for increasing the amount of installed RAM. 4

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Centre Number

Section II (continued)

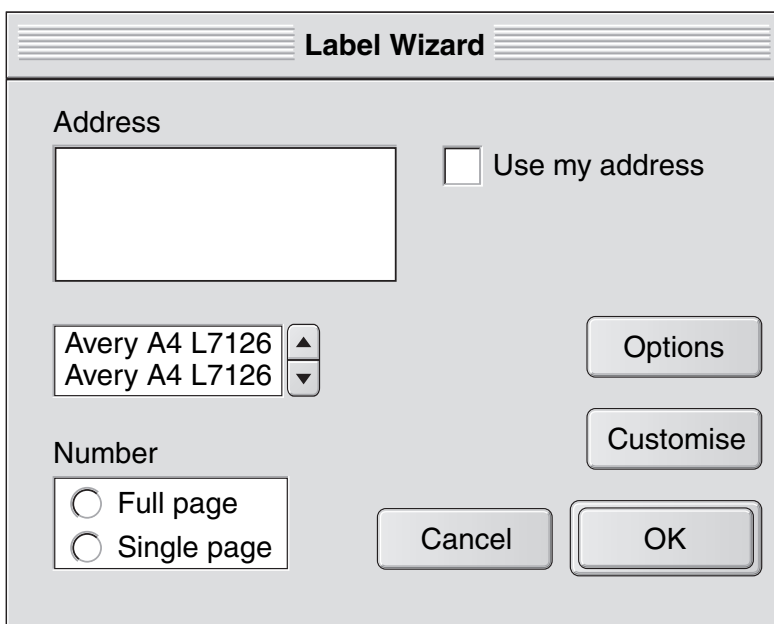
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Student Number

Marks

Question 19 (9 marks)

- (a) The dialog box below is one of a series from a wizard that automates the process of creating mailing labels in a word-processing application. **2**



Discuss the benefits to a business of using wizards.

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Question 19 continues on page 16

Question 19 (continued)

(b) A business wishes to relocate one of its workstation computers to an adjoining office. As part of the operation you are required to move and reconnect this computer.

(i) Identify ONE requirement relating to the relocation of this workstation that needs to be observed under OHS legislation. **1**

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(ii) The computer has an LCD monitor. The monitor is covered with dust, dirt and fingerprints. **2**

Describe a suitable method for cleaning this monitor.

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(iii) After reconnection, the workstation was switched on. It was unable to log in to the company's network or access the internet. **4**

Describe TWO procedures that could be used to identify the problem, using suitable diagnostic testing tools and software.

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Information Technology

Section III

30 marks

Attempt TWO questions from Questions 20–22

Allow about 1 hour for this section

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

In your answers you will be assessed on how well you:

- demonstrate relevant knowledge and understanding
 - communicate ideas and information, using precise industry terminology and appropriate workplace examples
 - organise information in a well-reasoned and cohesive response
 - solve proposed issues or problems
-

Question 20 (15 marks)

As a member of the IT support staff, you are required to set up a new workstation for your company. The workstation will need to have an operating system installed.

Describe and justify the steps involved in installing an operating system on this workstation. Your answer should consider the following:

- selection of an operating system
- sources of information available to assist with the installation
- minimum and recommended system requirements
- system security
- licences.

Please turn over

In your answers you will be assessed on how well you:

- demonstrate relevant knowledge and understanding
 - communicate ideas and information, using precise industry terminology and appropriate workplace examples
 - organise information in a well-reasoned and cohesive response
 - solve proposed issues or problems
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Question 21 (15 marks)

An interstate client has recently replaced an old workstation computer with a new computer, supplied by your company. They then installed the USB laser printer and USB flatbed scanner that had previously been attached to the old computer along with the supplied software suites from both peripherals.

The client has reported that the new workstation is operating slowly and erratically, and neither of the two peripherals is responding.

Prepare a memo to the client that provides suitable diagnostic and troubleshooting procedures to identify and overcome these problems.

Your answer should consider the following:

- connections
- drivers
- compatibility
- system tools.

Question 22 (15 marks)

Baywatch Pty Ltd is a new company that has contracted you to supply and install a workstation computer for each of its fifteen employees. The employees have little or no experience in using personal computers. As part of the contract you are required to produce user documentation that outlines general procedures for them to follow in order to install their required application software.

Explain the following as they should be addressed in the documentation:

- the differences between operating system software and application software
- appropriateness of application software to the operating system software
- policies and procedures for management of copyright
- identification of problems that may occur during installation, and possible solutions.

End of paper

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