

Information and Digital Technology

Web and Software Applications

General Instructions

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

Total marks – 80

Section I Pages 2–7

20 marks

- Attempt Questions 1–20
- Allow about 30 minutes for this section

Section II Pages 9–15

30 marks

- Attempt Questions 21–25
- Allow about 40 minutes for this section

Section III Page 17

15 marks

- Attempt Question 26
- Allow about 25 minutes for this section

Section IV Page 18

15 marks

- Attempt Question 27
- Allow about 25 minutes for this section

Section I

20 marks

Attempt Questions 1–20

Allow about 30 minutes for this section

Use the multiple-choice answer sheet for Questions 1–10.

- 1** Which of the following is managed by a computer's operating system?

 - (A) BIOS
 - (B) CPU usage
 - (C) Power supply
 - (D) CMOS battery

- 2** Which of the following is an internal source of work health and safety (WHS) information in an ICT organisation?

 - (A) Minutes of a compliance meeting
 - (B) A hardware manufacturer's manual
 - (C) A WorkCover information document
 - (D) An Australian Computer Society publication

- 3** Which of the following is the best method for safely removing a portable flash media device from a computer?

 - (A) Pull the device out gently
 - (B) Hibernate the computer then remove the device
 - (C) Close any open windows then remove the device
 - (D) Stop all related processes then remove the device

4 Read the following conversation.

CLIENT: Are you coming over to fix my printer?

TECHNICIAN: I'm busy at the moment. I'll be there around three.

CLIENT: Three is okay.

TECHNICIAN: Cool, see you at three.

What type of feedback does the client give to the technician?

- (A) Direct
- (B) Formal
- (C) Indirect
- (D) Negative

5 Which of the following is an example of diagnostic testing?

- (A) Running a file search on a hard drive
- (B) Configuring partitions on a hard drive
- (C) Backing up a faulty hard drive to a new hard drive
- (D) Checking the number of bad blocks on a hard drive

6 What is a *virus signature*?

- (A) The damage done by a computer virus
- (B) The code used to specifically identify a virus
- (C) The trail left behind after a virus infects a computer
- (D) The specific message the virus leaves on a computer

7 When should a risk assessment be adjusted?

- (A) On a daily basis
- (B) As soon as a worker makes a complaint
- (C) Where there is evidence that a risk is no longer valid
- (D) When no injuries have been recorded recently against a risk

- 8** What is a purpose of equal employment opportunity (EEO) in the workplace?
- (A) To ensure that all job interviews are recorded correctly
 - (B) To provide procedures for reducing bullying and intimidation
 - (C) To prohibit changes to conditions without consulting employees
 - (D) To ensure that people from minority groups are not disadvantaged
- 9** A DVD is inserted into a computer then the computer is restarted. The computer connects to the network and retrieves a task sequence to install an operating system image.
- Which installation method is described above?
- (A) Boot media installation with a recovery disk
 - (B) Recovery disk installation with a network image
 - (C) Network installation using boot media
 - (D) Install from an image using a network boot
- 10** What form of risk control is applied when a hazard is isolated?
- (A) Administration
 - (B) Assessing
 - (C) Elimination
 - (D) Minimisation

Use the multiple-choice answer sheet for Questions 11–20.

- 11** An office worker wants to use a software tool to help convert Australian dollars (AUD) to United States dollars (USD).

Which of the following would be the best to use?

- (A) A spreadsheet
 - (B) A presentation
 - (C) Web authoring
 - (D) Word-processing
- 12** Which of the following formulae adds a range of cells together?
- (A) =(A1:B5)
 - (B) =SUM(A1:B5)
 - (C) =SUM(A1+B5)
 - (D) =(SUM)A1:B5
- 13** This diagram shows part of a spreadsheet.

	Region	Number of sales
	East	40
	South	25
	North	48
	West	38
	Total	151

Which type of chart would best show each region's sales as part of the total?

- (A) Bar
- (B) Column
- (C) Line
- (D) Pie

- 14** Which of the following should be used to transfer files to a web server?
- (A) FTP
 - (B) HTTP
 - (C) HTML
 - (D) HTTPS
- 15** Which of the following is usually applied before a table of contents can be automatically generated in a word-processed document?
- (A) Autotext
 - (B) Tab leaders
 - (C) Default styles
 - (D) Format painter
- 16** Which of the following would be the most effective to reduce eye and neck strain?
- (A) Sit one metre from the display device with it facing the window
 - (B) Adjust the contrast of the display device and sit one metre away
 - (C) Position the top of the display at eye level and sit one metre away
 - (D) Use a monitor anti-glare screen and sit half a metre from the display device
- 17** Which of the following is required to change the page orientation for a single page in the middle of a document?
- (A) Page Break
 - (B) Section Break
 - (C) Column Break
 - (D) Orientation Break

18 Which form element is shown in the following image?



Towns	▼
Liverpool	▲
Newcastle	
Parramatta	
Tamworth	▼

- (A) Text box
- (B) Dialogue box
- (C) Drop-down box
- (D) Scrolling text box

19 A user manual is centrally stored and can be edited by a number of staff members.

Which feature of a word-processing application would enable the manager to see who has edited the file and what changes each person has made to the different versions?

- (A) File sharing
- (B) Track changes
- (C) Flag for follow-up
- (D) Automatic referencing

20 Which of the following is an advantage of embedding a spreadsheet file into a word-processed file?

- (A) The embedded data in the word-processed file cannot be changed.
- (B) The original spreadsheet file can be updated by updating the embedded data in the word-processed file.
- (C) The embedded word-processed file will be automatically updated when the original spreadsheet file is updated.
- (D) The embedded data in the word-processed file can be updated while keeping the original spreadsheet file unchanged.

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Centre Number

Section II

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Student Number

30 marks

Attempt Questions 21–25

Allow about 40 minutes for this section

Answer the questions in the spaces provided. These spaces provide guidance for the expected length of response.

Question 21 (6 marks)

(a) Why are power leads tagged?

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(b) Describe how a workstation can be set up to minimise neck, back and wrist pain.

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Question 22 (4 marks)

This diagram shows the home page for the ‘BullsEye’ operating system.

 BullsEye O.S. <i>Your Operating System</i>		DOWNLOAD HERE!			
Home	About	Documentation	Community	Developers	Support
<p>Welcome to BullsEye</p> <p>BullsEye O.S. is operating system software developed in a collaborative effort by a community of programming experts. The source code is available free of charge and is available for public use and/or modification from its original design.</p> <p>BullsEye O.S. provides this download without prejudice and “the collaborative” does not make any financial gain from its download. BullsEye O.S. may be downloaded in full or as an ISO to flash media and/or CD-ROM.</p> <p>>>Latest Release:BE 2.1.1</p> <p>This latest version of BullsEye contains all bug fixes previously listed by registered users. This version has been through a beta release on mobile and handheld devices for functionality.</p>					
 DOWNLOAD <<ISO IMAGE>>		 GET SUPPORT <<CHAT>> <<Email>>		 CONTRIBUTE <<CODE>> <<DONATE>>	

- (a) Identify TWO key features that define BullsEye O.S. as open source software. 2

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- (b) Outline a procedure for installing BullsEye O.S. using the ISO image from this website. 2

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Centre Number

Section II (continued)

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Student Number

Question 23 (5 marks)

- (a) Why is it NOT necessary to run a disk defragmenting utility on a solid state drive? **1**

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- (b) The following is part of a server backup log from a small business. **4**

<i>Date</i>	<i>Backup type</i>	<i>Media type</i>	<i>Media ID</i>	<i>Verified</i>
3/10/2014	Full	HDD	131003-A 131003-B	✓
6/10/2014	Incremental	Cloud	131006-A	✓
7/10/2014	Incremental	Cloud	131007-A	✓
8/10/2014	Differential	DVD	131008-A	✓
9/10/2014	Incremental	Cloud	131009-A	✓

Using the information in the backup log, describe and justify the most efficient procedure for restoring the full system in the event of a hardware failure on 10/10/2014.

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Question 24 (6 marks)

- (a) Using an example, distinguish between a formula and a function in a spreadsheet. **2**

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- (b) Describe file management functions that need to be implemented to ensure that a confidential document can only be accessed by authorised users and that the document is up to date. **4**

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Centre Number

Section II (continued)

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Student Number

Question 25 (9 marks)

- (a) What is a benefit of using cascading style sheets (CSS) in website development? **1**

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- (b) Why is it useful for a web author to understand coding as well as WYSIWYG authoring? **2**

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Question 25 continues on page 14

Question 25 (continued)

(c) This is the source code for a webpage.

```
<!DOCTYPE html>
<html lang="en">

<head>
<title>My Holiday</title>
</head>
<body style="background-color:yellow; font-family:arial;">

<h1>My Holiday</h1>
<p>We went to <strong><em>Hawaii</em></strong> by plane, then cruised to 4
<Strong><em>Tahitian islands</em></strong> on a cruise boat</p>
<p>We came back to Sydney on the cruise boat which was very
<em>relaxing</em></p>

    <h2>Oahu Hawaii</h2>
    <p>In Hawaii we stayed on the Island of Oahu</p>
    While in Oahu we visited the following places<br />
    <ul>
        <li><strong>Honolulu</strong>, Capital of Hawaii</li>
        <li>Pearl Harbour</li>
        <li>"USS Arizona" Monument</li>
        <li><p>
            <img src = "arizonamonumentsmall.png"
                alt = "USS Arizona monument" />
        </p></li>
        <li>Waikiki Beach</li>
        <li>Diamond Head</li>
        <li>Sunset Beach</li>
        <li>Waimea Bay</li>

    </ul>

<h6>copyright : GS. October 2014</h6>
</body>
</html>
```

Question 25 continues on page 15

Question 25 (continued)

Draw the webpage as it would appear in a browser based on the given code. You may use text to describe features you cannot draw.

6

End of Question 25

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Section III

15 marks

Attempt Question 26

Allow about 25 minutes for this section

Answer the question in a writing booklet. Extra writing booklets are available.

Question 26 (15 marks)

A small software company has produced a new range of online games using XHTML.

(a) Justify the use of online documentation over paper-based documentation for game support. **3**

(b) The company is considering purchasing images instead of creating its own images for its games. **4**

Discuss copyright issues associated with purchasing images for this purpose.

(c) The games will be accessible through a new website. **8**

Recommend and justify strategies for testing the website.

Please turn over

Section IV

15 marks

Attempt Question 27

Allow about 25 minutes for this section

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

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

- demonstrate knowledge and understanding relevant to the question
 - communicate ideas and information using relevant workplace examples and industry terminology
 - present a logical and cohesive response
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Question 27 (15 marks)

An online university, with staff and students physically located in different parts of Australia, requires communication resources for its staff and students to interact at any time.

Recommend and justify electronic communication methods and tools that could be used by the staff and students to communicate, collaborate within teams, access resources and submit work.

End of paper