

2017 HSC Information and Digital Technology Web and Software Applications Marking Guidelines

Section I

Multiple-choice Answer Key

Question	Answer
1	B
2	A
3	B
4	D
5	C
6	B
7	D
8	D
9	C
10	A
11	A
12	B
13	D
14	B
15	B
16	C
17	A
18	D
19	A
20	C

Section II

Question 21 (a)

Criteria	Marks
<ul style="list-style-type: none"> Identifies the purpose of a file extension and provides an example 	2
<ul style="list-style-type: none"> Identifies the purpose of a file extension OR <ul style="list-style-type: none"> Provides an example 	1

Sample answer:

A file extension identifies the application required to open the particular file, eg .doc.

Question 21 (b)

Criteria	Marks
<ul style="list-style-type: none"> Outlines TWO accessibility features of an operating system 	2
<ul style="list-style-type: none"> Identifies ONE accessibility feature of an operating system 	1

Sample answer:

Text to speech narration allows people with visual impairments to access written text by having it read out loud. ‘Sticky keys’ makes it possible to use keyboard shortcuts without needing to press more than one key at once.

Answers could include:

- Magnifier
- Voice control.

Question 21 (c)

Criteria	Marks
<ul style="list-style-type: none"> Explains the effect that the convergence of technologies has had on the ICT industry Provides relevant examples 	4
<ul style="list-style-type: none"> Outlines the effect that the convergence of technologies has had on the ICT industry Provides at least one relevant example 	3
<ul style="list-style-type: none"> Identifies some features of the development of technologies OR <ul style="list-style-type: none"> Outlines ONE features of the convergence of technologies 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

The incorporation of multiple functions within a single device has led to major changes in the ICT industry. Devices are now more complex and greater training is required for staff providing service and support for these devices. It has also led to a growth in the demand for software applications that run on mobile platforms. For example the smartphone usually includes a camera, a GPS, web browsing, eCommerce payment facilities, music, video and game player as well as a telephone. Other examples include multi-function printers that also scan, fax and copy.

Question 22

Criteria	Marks
<ul style="list-style-type: none"> Provides a description of the role of SafeWork NSW 	2
<ul style="list-style-type: none"> Identifies a function of SafeWork NSW 	1

Sample answer:

SafeWork NSW is responsible for providing advice to organisations on improving work health and safety, investigating workplace incidents and enforcing WHS laws in NSW. Its main purpose is to help organisations to meet their WHS obligations.

Answers could include:

Licensing and registration for dangerous work.

Question 23 (a)

Criteria	Marks
• Explains how a business may be affected by malicious software	2
• Provides some relevant information	1

Sample answer:

Malicious software such as viruses can cause corruption of files, leading to employee downtime or inability to work effectively while repairs are made.

Answers could include:

- Data loss
- Security breaches
- Slow loading times / processing speeds.

Question 23 (b)

Criteria	Marks
• Provides a list of relevant troubleshooting steps	3
• Identifies some relevant troubleshooting steps	2
• Identifies a relevant troubleshooting step	1

Sample answer:

Check:

- there is power to the device
- the keyboard is plugged in
- username and password are correct
- ‘Caps Lock’ key not on
- Wi-Fi on / network connectivity cable in
- server is running
- networking equipment
- proxy settings if applicable.

Question 24 (a)

Criteria	Marks
• Shows a sound understanding of how the Australian Computer Society’s Code of Ethics may be applied	2
• Shows a basic understanding of a code of ethics	1

Sample answer:

A user should only obtain legal copies of commercial software and keep up to date with skills and knowledge of commercial software products.

Answers could include:

- Honesty
- Integrity
- Uphold and advance honour and dignity of profession
- Acting within the law.

Question 24 (b)

Criteria	Marks
• Identifies what FTP stands for and its purpose	2
• Identifies what FTP stands for OR • Identifies its purpose	1

Sample answer:

FTP stands for file transfer protocol. It is used for the transfer of files from a client computer to a web server.

Question 24 (c)

Criteria	Marks
• Identifies a range of sources with appropriate justification	4
• Identifies sources of support with some justification	3
• Identifies ONE source of support and justifies its use OR	2
• Identifies sources of support	
• Identifies a source of support	1

Sample answer:

Tony could use the help feature that is provided as part of the software. This type of online help is up to date and reliable as it is provided by the vendor.

He could also submit a question to a support forum where other users that have solved the problem previously can share their knowledge. Tony could search for video tutorials online that demonstrate how to complete his frequently used functions.

Answers could include:

- Vendor/supplier documentation
- Training materials
- Operations manual
- Knowledge base.

Question 25

Criteria	Marks
• Demonstrates a thorough understanding of why the website needs to be tested prior to its launch	3
• Demonstrates some understanding of why website testing is important	2
• Identifies a reason for testing a website	1

Sample answer:

It is important to test a new website to ensure consistent presentation across different browsers and performance across different devices eg laptop, tablet, phone. It needs to meet client needs for content and accessibility.

Answers could include:

- Loading times
- Website performance
- Colour/contrast
- Accessibility checks.

Question 26

Criteria	Marks
<ul style="list-style-type: none"> • Clearly shows the differences between the use of HTML coding and WYSIWYG authoring tools in producing a website 	4
<ul style="list-style-type: none"> • Identifies features of HTML coding and WYSIWYG authoring tools in relation to website production 	3
<ul style="list-style-type: none"> • Identifies features of HTML coding and/or WYSIWYG authoring tools 	2
<ul style="list-style-type: none"> • Identifies a feature of HTML coding or WYSIWYG authoring tools 	1

Sample answer:

Skill in coding is required to use HTML and there are often more features available to create more complex pages. HTML can be easily edited in a range of applications including word processors. In order to see what is being created the HTML needs to be loaded into a browser.

WYSIWYG is a ‘what you see is what you get’ graphical user interface which provides immediate feedback on how your webpage is looking and performing. It is intuitive and is often used by people with limited HTML coding experience as it can locate and assist with the resolution of webpage errors.

Section III

Question 27 (a)

Criteria	Marks
• Shows why file naming and saving conventions are important for the company	3
• Shows some understanding of file naming and/or saving conventions	2
• Shows a basic understanding of file naming or saving conventions	1

Sample answer:

Websites are developed by teams of web designers who often need to access large numbers of common files. Having a standardised structure for naming and storing files saves time for all concerned, better facilitates updates and maintenance and avoids duplication of files.

Question 27 (b)

Criteria	Marks
• Explains how formatting features may be used to improve the structure and visual appeal of text in the company’s documents	4
• Outlines some formatting features for improving the structure and visual appeal of text	3
• Outlines one formatting feature for improving the structure or visual appeal of text OR	2
• Identifies TWO formatting features	
• Identifies a formatting feature	1

Sample answer:

Columns can be used to divide text into two or more segments that maximise the space and aid readability.

Pagination is ensuring that page breaks are entered at logical places within a document to ensure paragraphs are not split and headings appear in appropriate places.

Tables are useful for displaying organised and related information in an easy-to-read format using columns, rows, headings and borders.

Answers could include:

- Paragraphs
- Sections
- Tabs
- Bulleted and numbered lists.

Question 27 (c)

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates a thorough understanding of how templates and document automation can be used to improve document presentation and efficiency of document production • Supports answer with examples 	8
<ul style="list-style-type: none"> • Demonstrates a sound understanding of how templates and/or document automation can be used to improve document presentation and efficiency of document production • Includes examples 	6–7
<ul style="list-style-type: none"> • Outlines ways that templates and/or document automation can be used in document presentation and/or efficient document production • Includes at least one example 	4–5
<ul style="list-style-type: none"> • Identifies ways that templates and/or document automation can be used in document presentation and/or production 	2–3
<ul style="list-style-type: none"> • Shows a basic understanding of document presentation or production 	1

Sample answer:

One way to improve document presentation and efficiency of document production is by using templates for commonly prepared documents such as letters, invoices, brochures and webpages. Templates save production time and will ensure that the look of documents meets organisational standards such as fonts, font size, logo placement, colours. Templates can be shared or accessed on a network by staff. Such templates should have restricted permissions to ensure that they are not accidentally modified or deleted by unauthorised staff.

To improve efficiency, staff can be trained in the use of document automation tools such as macros and shortcuts. These allow commonly used operations or tasks to be executed by the use of a single keystroke or button/icon. A macro or script can be created by recording a series of steps that are commonly used and, when executed, will perform those functions on document content, eg doing a mathematical calculation on an invoice. It is also useful for staff to learn software shortcuts that reduce keystrokes or mouse usage, therefore reducing document creation time.

Answers could include:

Version control.

Section IV

Question 28

Criteria	Marks
<ul style="list-style-type: none"> Addresses all components of the question Provides a cohesive, well-reasoned, sequenced response that reflects a high level of organisation, judgement, synthesis and problem-solving skills Demonstrates an in-depth understanding of how to raise awareness on the importance of consultation and participation in WHS processes with reference to the scenario Consistently uses relevant industry terminology 	13–15
<ul style="list-style-type: none"> Addresses most components of the question Provides a reasoned, sequenced response that reflects a high level of organisation and problem-solving skills Demonstrates a detailed understanding of how to raise awareness on the importance of consultation and participation in WHS processes with reference to the scenario Uses relevant industry terminology 	10–12
<ul style="list-style-type: none"> Addresses the majority of the components of the question Provides a response displaying sound organisation and problem-solving skills Demonstrates a sound understanding of how to raise awareness on the importance of consultation and participation in WHS processes with reference to the scenario Uses some relevant industry terminology 	7–9
<ul style="list-style-type: none"> Addresses some components of the question Provides a response displaying some organisation and problem-solving skills Demonstrates some understanding of how to assist the organisation in the scenario 	4–6
<ul style="list-style-type: none"> Addresses at least one component of the question Provides a response displaying basic organisation Demonstrates a basic understanding of concerns in the scenario 	1–3

Answers could include:

- Facilitate a supportive workplace culture
- Cater for the needs of people with disabilities
- Address language and literacy levels of participants
- Promote a systematic approaches to work
- Improve poor communication skills
- Cater for cultural differences
- Encourage communication between workers on different shifts
- Improve workplace procedures
- Understand employer and staff roles and responsibilities relating to WHS
- Need to comply with WHS regulations.

2017 HSC Information and Digital Technology

Web and software applications

Mapping Grid

Section I

Question	Marks	HSC content – focus area
1	1	(Mandatory) Working in the industry — nature of the industry – page 24
2	1	(Mandatory) Safety — safe work practices and procedures – pages 38–39
3	1	(Mandatory) Operating system software — operating systems – page 29
4	1	(Mandatory) Operating system software — operating systems – page 30
5	1	(Mandatory) Diagnostic testing — troubleshooting – page 33
6	1	(Mandatory) Safety — risk management – page 38
7	1	(Mandatory) Diagnostic testing — destructive and malicious software protection – page 34–35
8	1	(Mandatory) Operating system software — operating systems – page 29
9	1	(Mandatory) Working in the industry — nature of the industry – page 24
10	1	(Mandatory) Diagnostic testing — preventative maintenance – page 34
11	1	(Stream) Web and software applications — commercial software packages – page 43
12	1	(Stream) Web and software applications — features and functions – page 44
13	1	(Stream) Web and software applications — document and website production requirements – page 43
14	1	(Stream) Web and software applications — additional features and functions – page 44
15	1	(Stream) Web and software applications — features and functions – page 44
16	1	(Stream) Web and software applications — additional features and functions – page 45
17	1	(Stream) Web and software applications — document and website production requirements – page 43
18	1	(Stream) Web and software applications — additional features and functions – page 45
19	1	(Stream) Web and software applications — additional features and functions – page 45
20	1	(Stream) Web and software applications — additional features and functions – page 45

Section II

Question	Marks	HSC content – focus area
21 (a)	2	(Mandatory) Operating system software — configuring an operating system – page 30
21 (b)	2	(Mandatory) Operating system software — selecting an operating system, accessibility – page 29
21 (c)	4	(Mandatory) Working in the industry — nature of the industry – page 24
22	2	(Mandatory) Safety — WHS – page 37
23 (a)	2	(Mandatory) Diagnostic testing — client business context – page 33

23 (b)	3	(Mandatory) Diagnostic testing — troubleshooting – page 33
24 (a)	2	(Stream) Web and software applications — commercial software packages – page 43
24 (b)	2	(Stream) Web and software applications — document and website production requirements – page 43
24 (c)	4	(Stream) Web and software applications — problem-solving – page 45
25	3	(Stream) Web and software applications — website authoring – page 45
26	4	(Stream) Web and software applications — additional features and functions – page 45

Section III

Question	Marks	HSC content – focus area
27 (a)	3	(Stream) Web and software applications — document and website production requirements – page 43
27 (b)	4	(Stream) Web and software applications — additional features and functions – page 44
27 (c)	8	(Stream) Web and software applications — additional features and functions – page 44

Section IV

Question	Marks	HSC content – focus area
28	15	(Mandatory) Working in the industry — working with others – pages 26–27 (Mandatory) Safety — WHS consultation and participation – page 39