
2018 HSC Information and Digital Technology Web and Software Applications Marking Guidelines

Section I

Multiple-choice Answer Key

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

Section II

Question 21 (a)

Criteria	Marks
• Identifies TWO workplace practices	2
• Identifies ONE workplace practice	1

Sample answer:

The workstations can be set to hibernate during periods of inactivity. Printers can be set to duplex printing to save paper.

Answers could include:

Printing in draft mode to save ink.

Question 21 (b)

Criteria	Marks
• Outlines TWO suitable types of communication	3
• Identifies TWO suitable types of communication OR	2
• Outlines a suitable type of communication	
• Identifies a suitable type of communication	1

Sample answer:

A memo or email could be circulated between all staff outlining the reasons for the changes and how they will be implemented. There could also be a meeting where staff are briefed on the implementation of changes.

Question 22

Criteria	Marks
• Explains why a UPS would be recommended	3
• Shows some understanding of the use of a UPS	2
• Identifies a feature of a UPS	1

Sample answer:

A UPS would enable the file server and critical workstations to continue to operate during a power failure. The UPS will also act as a filter that will remove power surges that could damage the equipment.

Answers could include:

The UPS software is also able to automatically shut down a file server to prevent data loss.

Question 23 (a)

Criteria	Marks
• Correctly identify one solution	1

Sample answer:

- Rotate the workstation so not facing the glare.

Answers could include:

- Use a larger monitor.
- Take regular breaks and follow the 20/20/20 rule.

Question 23 (b)

Criteria	Marks
• Identifies one issue other than eyestrain and provides a suitable solution	2
• Identifies one issue other than eyestrain	1

Sample answer:

- There are electrical cords on the walkway. These can be taped up or re-routed to clear walkway.

Answers could include:

- There are boxes on the floor next to workstation. The boxes should be removed to minimise trip hazard.
- Printer set-up is too low for a standing workstation; a higher table can be used to station printers.

Question 23 (c)

Criteria	Marks
<ul style="list-style-type: none"> Justifies the use of an adjustable standing desk over a conventional fixed desk and chair Uses relevant examples to support answer 	4
<ul style="list-style-type: none"> Identifies benefits of using an adjustable standing desk and outlines at least one of them 	3
<ul style="list-style-type: none"> Identifies benefits of using an adjustable standing desk OR <ul style="list-style-type: none"> Outlines a benefit of using an adjustable standing desk 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

A standing desk is useful compared with a traditional fixed desk and chair because it allows the user to swap between standing and sitting, minimising the risk of staying in one position for too long. The height of the table can be adjusted allowing it to work more flexibly with other equipment such as a scanner and 3D printer where more hands-on activities are involved. It can also cater to special needs of people who require significant adjustment eg too short, or too tall for fixed desk and chair.

Answers could include:

- Ability to allow the user to personalise the workstation especially when working on laptops where it is hard to be ergonomic when using a fixed desk and chair.

Question 24

Criteria	Marks
<ul style="list-style-type: none"> Explains how mail merge can be applied with reference to the scenario 	3
<ul style="list-style-type: none"> Shows some understanding of mail merge with reference to the scenario 	2
<ul style="list-style-type: none"> Shows a basic understanding of mail merge 	1

Sample answer:

The business can use a mail merge wizard to generate the personalised invitations. The invitation can be typed using a word-processing software. The name and address fields from the spreadsheet can be inserted into the word-processed invitation as merge fields. When the business chooses to merge and print the invitations, an invitation will be generated for each customer with their name and address from the spreadsheet.

Question 25 (a)

Criteria	Marks
<ul style="list-style-type: none"> Clearly shows how the issue can be addressed using suitable word-processing tools 	3
<ul style="list-style-type: none"> Identifies suitable word-processing tools for addressing the issue OR <ul style="list-style-type: none"> Outlines how the issue can be addressed using a suitable word-processing tool 	2
<ul style="list-style-type: none"> Shows a basic understanding of word-processing tools 	1

Sample answer:

The business can use a template and a style for formatting their business documents. A template provides a consistent layout for all documents. A style will aid with a consistent look by setting the font and font size, colour schemes and paragraph spacing.

Question 25 (b)

Criteria	Marks
<ul style="list-style-type: none"> Lists the steps involved in creating an automatic table of contents 	3
<ul style="list-style-type: none"> Lists some steps involved in creating an automatic table of contents 	2
<ul style="list-style-type: none"> Identifies a feature of a table of contents 	1

Sample answer:

- Step 1. Make sure all major headings are formatted correctly using styles – eg Heading 1.
- Step 2. Ensure subheadings are formatted using styles – eg Heading 2.
- Step 3. Ensure page breaks are used appropriately.
- Step 4. Ensure your cursor is at the correct location to insert automatic table of contents.
- Step 5. Click on Reference and insert an automatic table of contents.

Question 26 (a)

Criteria	Marks
<ul style="list-style-type: none"> Outlines TWO ways to enhance accessibility 	2
<ul style="list-style-type: none"> Outlines ONE way to enhance accessibility 	1

Sample answer:

The website could provide a zoom feature so that people with vision problems can read the enlarged text. Text-to-voice facilities may also be included for people with limited vision.

Question 26 (b)

Criteria	Marks
• Correctly completes the HTML code	4
• Provides substantially correct HTML code	3
• Provides some relevant HTML code	2
• Shows a basic understanding of HTML	1

Sample answer:

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

```
<body style="background-color:white; font-family:arial;">
```

```
<h1>Kim's to-do list</h1>
```

```
<h2><strong>Tuesday</strong></h2>
```

```
<ol>
```

```
<li>Shopping</li>
```

```
<li>Homework</li>
```

```
<li>Movies</li>
```

```
</ol>
```

```
<p>Check www.educationstandards.nsw.edu.au
```

```
href="http://www.educationstandards.nsw.edu.au">for exam timetable"</p>
```

```
</html>
```

Answers could include:

The following elements of HTML coding:

- Heading syntax showing different level
- Strong syntax showing bolding of text
- Ordered list
- Hyperlink
- Style and font for the body
- Body tag
- Paragraph.

Section III

Question 27 (a)

Criteria	Marks
<ul style="list-style-type: none"> • Outlines benefits of using the software package 	3
<ul style="list-style-type: none"> • Identifies some benefits of using the software package OR	2
<ul style="list-style-type: none"> • Outlines one benefit of using the software package 	
<ul style="list-style-type: none"> • Identifies a benefit of using the software package 	1

Sample answer:

A web authoring software package allows webpages to be previewed in the browser. It allows the ongoing management and maintenance of the website. It allows the use of widgets such as contact forms and slideshows.

Question 27 (b)

Criteria	Marks
<ul style="list-style-type: none"> • Discusses TWO suitable methods 	4
<ul style="list-style-type: none"> • Outlines TWO suitable methods OR	3
<ul style="list-style-type: none"> • Identifies TWO suitable methods and discusses at least ONE of them 	
<ul style="list-style-type: none"> • Identifies TWO suitable methods OR	2
<ul style="list-style-type: none"> • Outlines ONE suitable method 	
<ul style="list-style-type: none"> • Identifies ONE suitable method 	1

Sample answer:

Two suitable methods are FTP and web authoring software. FTP is free and can transfer an individual file or groups of files. However, it is text-based and requires more expertise to use. Web authoring software is easier to use and allows an entire website to be published in one operation. However, it needs to be purchased.

Question 27 (c)

Criteria	Marks
<ul style="list-style-type: none"> Provides recommendations for resolving the website issues and improving its performance Justifies the recommendations showing comprehensive understanding of the website issues and how to improve its performance 	8
<ul style="list-style-type: none"> Provides recommendations for resolving the website issues and improving its performance Provides some justifications showing sound understanding of the website issues and how to improve its performance 	6–7
<ul style="list-style-type: none"> Outlines relevant recommendations and provides some justification 	4–5
<ul style="list-style-type: none"> Outlines a relevant recommendation <p>OR</p> <ul style="list-style-type: none"> Identifies relevant recommendations 	2–3
<ul style="list-style-type: none"> Shows a basic understanding of website maintenance 	1

Answers may include:

- Seashore High School can utilise a sitemap to assist with navigation of the website.
- A navigation bar structured similarly to the sitemap can provide a consistent presentation allowing student and community members to find information more easily.
- A dedicated website coordinator in the school would ensure all content is current.
- A CSS style sheet should be used for the whole site to allow consistent presentation of the website.

Performance of the website:

- Use commercial software or service to ensure the website can cope with the traffic.
- Old information on the website including photos, news should be archived.
- Photos and videos can be uploaded to external services to free up loading time of the website.
- Website coordinator should be checking the website regularly for active links to ensure the currency of the website.

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 the issues in 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 the issues in 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 the issues in 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 the issues 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 the issues in the scenario 	1–3

Answers could include:

To minimise complaints from the employees, and to ensure a business’s computers are working properly and free of destructive or malicious software, the business needs to have the following procedures addressed:

- preventative maintenance
- troubleshooting, and
- virus protection.

Preventative maintenance:

The procedure should include strategies for maintaining computer hardware, software and peripherals in good working order. Staff should be encouraged to physically inspect their equipment on a regular basis. Back-ups and routine maintenance, such as installing updates, cleaning and repairing and optimising hard drives should be performed regularly. The business should provide a proper environment for the use of computer equipment by protecting power sources with surge protectors and having appropriate environmental conditions. By doing this, complaints about computers running slow and loss of data will decrease.

Troubleshooting:

The procedure should outline how staff could perform troubleshooting tasks on common problems so as to keep the computers working properly. Run diagnostic tests and take follow-up action, resolve the identified problem and implement preventative measures to reduce the chance of future problems.

Some of the most common types of problems are:

- electrical issues (cable slightly unplugged)
- operator/user (caps lock, forgotten password).

If staff are able to troubleshoot problems themselves, then computers will have less downtime and complaints of computers having sparking noises will decrease.

Virus Protection:

The procedure should make provisions for the regular download of the latest virus definitions and scheduled scanning for viruses and destructive/malicious software. If staff encounter a virus, they should report it to ICT so that they can remove the PC from the network to prevent further spread to other network devices. By keeping virus protection up-to-date, the chances of employees having annoying pop-ups will be minimal.

By including strategies in preventative maintenance, troubleshooting and virus protection in their procedures a company is more likely to have their computers working properly and free of destructive/malicious software. There will be fewer complaints and less computer downtime when problems do occur and the life of the computers will also be extended.

2018 HSC Information and Digital Technology Web and Software Applications Mapping Grid

Section I

Question	Marks	HSC content – focus area
1	1	(Mandatory) Operating system software — installing an operating system – page 30
2	1	(Mandatory) Safety — risk management – page 38
3	1	(Mandatory) Working in the industry — employment – page 24
4	1	(Mandatory) Working in the industry — ICT worker – page 26
5	1	(Mandatory) Working in the industry — anti-discrimination – page 25
6	1	(Mandatory) Safety — WHS information and data – page 40
7	1	(Mandatory) Safety — safe work practices and procedures – page 39
8	1	(Mandatory) Operating system software — installing an operating system – page 30
9	1	(Mandatory) Operating system software — configuring an operating system – page 30
10	1	(Mandatory) Operating system software — installing an operating system – page 30
11	1	(Stream) Web and software applications — features and functions common across word processing, spreadsheet and web authoring software – page 44
12	1	(Stream) Web and software applications — features and functions common across word processing, spreadsheet and web authoring software – page 44
13	1	(Stream) Web and software applications — additional features and functions specific to word processing, spreadsheet and web authoring software – page 45
14	1	(Stream) Web and software applications — additional features and functions specific to word processing, spreadsheet and web authoring software – page 45
15	1	(Stream) Web and software applications — features and functions common across word processing, spreadsheet and web authoring software – page 44
16	1	(Stream) Web and software applications — problem solving – 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 specific to word processing, spreadsheet and web authoring software – page 45
19	1	(Stream) Web and software applications — features and functions common across word processing, spreadsheet and web authoring software – page 44
20	1	(Stream) Web and software applications — additional features and functions specific to word processing, spreadsheet and web authoring software – page 45

Section II

Question	Marks	HSC content – focus area
21 (a)	2	(Mandatory) Working in industry — work practices – page 26
21 (b)	3	(Mandatory) Working in industry — communication – page 27
22	3	(Mandatory) Diagnostic testing — preventative maintenance – page 34
23 (a)	1	(Mandatory) Safety — safe work practices and procedures – page 39
23 (b)	2	(Mandatory) Safety — safe work practices and procedures – page 38
23 (c)	4	(Mandatory) Safety — safe work practices and procedures – page 39
24	3	(Stream) Web and software applications — additional features and functions specific to word processing, spreadsheet and web authoring software – page 45
25 (a)	3	(Stream) Web and software applications — features and functions common across word processing, spreadsheet and web authoring software – page 44
25 (b)	3	(Stream) Web and software applications — additional features and functions specific to word processing, spreadsheet and web authoring software – page 44
26 (a)	2	(Stream) Web and software applications — website authoring – page 45
26 (b)	4	(Stream) Web and software applications — additional features and functions specific to word processing, spreadsheet and web authoring software – page 45

Section III

Question	Marks	HSC content – focus area
27 (a)	3	(Stream) Web and software applications — commercial software packages – page 43
27 (b)	4	(Stream) Web and software applications — document and website production requirements – page 43
27 (c)	8	(Stream) Web and software applications — problem-solving – page 45

Section IV

Question	Marks	HSC content – focus area
28	15	(Mandatory) Diagnostic testing — client business context – page 33