

2022 HSC Information and Digital Technology Web and Software Applications Marking Guidelines

Section I

Multiple-choice Answer Key

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

* The word 'regularly' was omitted from the question

Section II

Question 21

Criteria	Marks
• Describes skills of an employee working in IT customer service	3
• Outlines some skills of an employee working in customer service	2
• Provides some relevant information	1

Sample answer:

An IT industry employee should possess effective communication and interpersonal skills, strong organisation and time management skills with the ability to meet deadlines. They should also have a sound understanding of technologies. This would enable them to problem solve more effectively for customers.

Question 22

Criteria	Marks
• Describes strategies for troubleshooting this problem	4
• Outlines strategies for troubleshooting this problem	3
• Outlines ONE strategy for troubleshooting this problem OR	2
• Identifies strategies for troubleshooting this problem	
• Provides some relevant information	1

Sample answer:

An IT technician could suggest that the client try rebooting the workstation to see if the issue has been resolved and the keyboard is being detected. They could also suggest replacing the batteries in the keyboard in order to see if the keyboard light is activated. This shows that the keyboard is working and the issue is from the workstation.

Answers could include:

- Test keyboard on an alternative workstation
- Test workstation with another keyboard
- Update drivers
- Make sure bluetooth is on

Question 23 (a)

Criteria	Marks
• Explains what needs to be considered when selecting an operating system	3
• Outlines considerations when selecting an operating system	2
• Provides some relevant information	1

Sample answer:

Stability and robustness of the operating system are vital for any workstation and one of the most important features, because this will ensure that the OS is reliable and does not interrupt workflow. Memory management should also be considered as a factor of the OS as it manages memory usage.

Question 23 (b)

Criteria	Marks
• Describes the steps involved in installing an operating system	5
• Outlines the main steps involved in installing an operating system	4
• Identifies some steps involved in installing an operating system	2-3
• Identifies a step taken when installing an operating system	1

Sample answer:

Obtain the operating system installation disc or download the installation program. Then start the installation program. When prompted at the boot menu, select interface language and location. Enter the product key where required in order to activate the installation. Accept the End-User Licence Agreement. Select and install all required device drivers and updates. Note the computer will reboot several times during the installation process.

Question 24

Criteria	Marks
<ul style="list-style-type: none"> • Outlines the purpose of commercial software packages 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

A commercial software package is any software or program that is designed and developed for licensing or sale to end users or that serves a commercial purpose. Typical commercial software includes word processing, spreadsheet or web authoring software packages.

Question 25 (a)

Criteria	Marks
<ul style="list-style-type: none"> • Outlines TWO benefits of file-naming conventions 	2
<ul style="list-style-type: none"> • Outlines ONE benefit of file-naming conventions 	1

Sample answer:

File-naming conventions help you stay organised and make it easier to identify your files. By consistently organising files, you will be able to quickly and easily find what is needed. In a shared or collaborative space, it will also assist others in locating what they are looking for.

Question 25 (b)

Criteria	Marks
<ul style="list-style-type: none"> • Describes how to sort text within a word-processing application 	3
<ul style="list-style-type: none"> • Outlines how to sort text within a word-processing application 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

To sort text in a word-processing application, a user will need to select the text they wish to sort, then go to Home bar, select the Sort tool, then set the parameters in the order of the sort required and select OK. This can also be achieved by using the A → Z arrow icon in the Home ribbon if available.

Question 26 (a)

Criteria	Marks
• Explains how client needs may affect the design of a web page	3
• Describes how client needs may affect the design of a web page	2
• Provides some relevant information	1

Sample answer:

A client's needs in regards to layout and content may affect the design of a web page due to the images and text required. A client who requires a large number of images will alter web page design as the balance of image to text will need to be considered so that the web page achieves its aims.

Question 26 (b)

Criteria	Marks
• Explains the features that protect the user when using the website	5
• Explains some features that protect the user when using the website	4
• Outlines some features that protect a user when using the website	3
• Outlines a relevant feature	2
• Provides some relevant information	1

Sample answer:

The drop-down boxes, such as 'Date' and 'Venue', protect a user of this website as they minimise the chances of selecting the incorrect venue or the wrong date as these can be predefined. The SSL, as indicated by the padlock icon, provides encryption of sensitive data, such as credit card information. This protects the user from having their credit card details stolen during the transaction. The 'confirm' button also protects the user as it allows the user a final check of entered details before proceeding with the booking.

Answers could include:

Legitimacy of the website

- Contact page
- Privacy policy
- Terms and conditions.

Section III

Question 27 (a)

Criteria	Marks
<ul style="list-style-type: none"> Shows a thorough understanding of why site maps are important in planning website navigation 	3
<ul style="list-style-type: none"> Shows an understanding of why site maps are important in planning website navigation 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

Site maps are important in web and software applications as they provide easy access to parts of a website that may require several clicks to navigate to. This allows for smooth and easy navigations. Site maps are also important as they are a visual record of the page links and functionality. They have the advantage of showing a user the relationships between different segments of a website.

Question 27 (b)

Criteria	Marks
<ul style="list-style-type: none"> Explains why testing for consistent presentation and performance is important in a newly built website 	4
<ul style="list-style-type: none"> Describes why testing for consistent presentation and performance is important in a newly built website 	3
<ul style="list-style-type: none"> Shows some understanding of testing AND/OR presentation AND/OR performance of a website 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

Testing for consistent presentation is important with a newly built website as inconsistencies in elements such as colour and layout may result in a poor user experience. Font choice and point size regarding headings and titles need to be considered and colours checked for balance. Not considering this may result in a user finding the website unattractive and, as a result, ignoring it.

Testing for consistent performance is important with a newly built website to ensure the website functions as intended with no broken links as this may affect a user's experience. If the website contains too many images or embedded videos, it may require more bandwidth than the user has. This will result in slow loading and user frustration. Testing the performance of these elements before release is important for overall user experience.

Question 27 (c)

Criteria	Marks
• Explains sources of support that can be used to solve software-related issues	8
• Describes sources of support that can be used to solve software-related issues	6–7
• Outlines sources of support that can be used to solve software issues	4–5
• Demonstrates some understanding of sources of support	2–3
• Provides some relevant information	1

Answers could include:

Sources of support commonly used to solve software-related problems:

- Documentation:
 - manual, client user support documents
 - training material
 - vendor/supplier documentation
 - review handover documentation.
- User support and documentation
- Online help
- Technical support:
 - troubleshooting results
 - alert message.
- Review previous workplace documentation
 - previous logs for similar problems or requests.

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 the majority of the 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 some 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 at least one component 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"> Provides a response displaying basic organisation Demonstrates a basic understanding of the issues in the scenario 	1–3

Answers could include:

Physical environment

- Electrical – trip hazard
- Ergonomic – referral, supervisor, maintenance, referral to WHS committee
- Lighting – referral to manager or maintenance
- Manual handling – signage or referral to WHS committee
- Furniture – removal of broken furniture/chair – referral to WHS committee

Working with others

- Importance of acting within WHS authority level – clear communication
- Working with others – following organisation’s procedures in relation to escalation of issue
- Communication methods – active listening, conflict resolution
- Remove hazard, report hazard, place appropriate signage to avoid hazard in workplace

Troubleshooting and preventative maintenance

- Process of elimination
- Electrical issues
- Hardware
- Software
- Connectivity
- Diagnostic testing
- Physical inspection of equipment
- Backup procedures
- Schedule of routine maintenance
- Environment of equipment.

2022 HSC Information and Digital Technology

Web and software applications

Mapping Grid

Section I

Question	Marks	HSC content – focus area
1	1	Core: Diagnostic testing – troubleshooting p33
2	1	Core: Safety – safe work practices and procedures p39
3	1	Core: Working in the industry – nature of the industry p24
4	1	Core: Working in the industry – employment p24
5	1	Core: Working in the industry – nature of the industry p24
6	1	Core: Safety – safe work practices and procedures – clean-up procedures and waste disposal – p39
7	1	Core: Operating system software – operating systems p29
8	1	Core: Diagnostic testing – preventative maintenance p34
9	1	Core: Working in the industry – anti-discrimination p25
10	1	Core: Operating system – installing an operating system p30
11	1	Web and Software Applications: commercial software packages p44
12	1	Web and Software Applications: documents and website production requirements p44
13	1	Web and Software Applications: features and functions common across word processing, spreadsheet and authoring software p45
14	1	Web and Software Applications: features and functions common across word processing, spreadsheet and authoring software p45
15	1	Web and Software Applications: documents and website production requirements p44
16	1	Web and Software Applications: additional features and functions specific to word processing, spreadsheet and authoring software p45
17	1	Web and Software Applications: additional features and functions specific to word processing, spreadsheet and authoring software p46
18	1	Web and Software Applications: problem-solving p46
19	1	Web and Software Applications: features and functions specific to word processing, spreadsheet and authoring software p45
20	1	Web and Software Applications: additional features and functions specific to word processing, spreadsheet and authoring software p46

Section II

Question	Marks	HSC content – focus area
21	3	Core: Working in the industry – work practices p26
22	4	Core: Diagnostic testing – troubleshooting p33
23 (a)	3	Core: Operating system software – selecting an operating system p29
23 (b)	5	Core: Operating system software – installing an operating system p30
24	2	Web and Software Applications: commercial software packages p44
25 (a)	2	Web and Software Applications: document and website production requirements p44

25 (b)	3	Web and Software Applications: additional features and functions specific to word processing, spreadsheet and authoring software p46
26 (a)	3	Web and Software Applications: document and website production requirements p44
26 (b)	5	Web and Software Applications: features and functions common across word processing, spreadsheet and authoring software p45

Section III

Question	Marks	HSC content – focus area
27 (a)	3	Web and Software Applications: website authoring p47
27 (b)	4	Web and Software Applications: website authoring p47
27 (c)	8	Web and Software Applications: problem-solving p46

Section IV

Question	Marks	HSC content – focus area
28	15	Core: Safety – work health and safety (WHS) p37–40 Core: Working in the industry – working with others p26–27 Core: Diagnostic testing – preventative maintenance p33–34