



APPLIED INFORMATION TECHNOLOGY

ATAR course examination 2020

Marking key

Marking keys are an explicit statement about what the examining panel expect of candidates when they respond to particular examination items. They help ensure a consistent interpretation of the criteria that guide the awarding of marks.

Section One: Multiple-choice

15% (15 Marks)

Question	Answer
1	b
2	a
3	d
4	b
5	d
6	d
7	c
8	a
9	a
10	c
11	c
12	a
13	c
14	b
15	d

Section Two: Short answer

25% (51 Marks)

Question 16

(4 marks)

- (a) Identify **two** negative issues that consumers need to be aware of in relation to this increased connectivity in their homes. (2 marks)

Description	Marks
Identifies one to two negative issue(s) of increased connectivity of devices in the home.	1–2
Total	2
Answers could include: <ul style="list-style-type: none"> • devices may be hacked as they have limited security measures in place • some devices have recording capabilities which may result in lack of privacy • some families may have to purchase new ISP plans to cope with increased network traffic • costs of interconnected devices and operation/maintenance is higher. 	
Accept other relevant answers.	

- (b) Describe a way that Web 3.0 interconnectivity can be used to improve experiences for consumers. (2 marks)

Description	Marks
Describes a way that connected devices may be used to improve the experience of a user with Web 3.0	2
Identifies a feature of Web 3.0	1
Total	2
Answers could include: <ul style="list-style-type: none"> • consumers with smart watches could be recording their heart rate during exercise; based on results consumers can modify exercises to improve their heart rate over time and track results; improves experience for the consumer as they have access to live data of fitness levels. • search engines can tailor searches for the consumer resulting in fast result response times to search queries; improves experience for the consumer by reducing frustration and providing information quickly and efficiently. 	
Accept other relevant answers.	

Question 17

(5 marks)

- (a) State the purpose of the world wide web consortium (W3C). (1 mark)

Description	Marks
States the purpose of the W3C	1
Total	1
Answers could include: <ul style="list-style-type: none"> W3C was established to help in the development of web design standards to make web design accessible and inclusive for all users regardless of abilities. 	
Accept other relevant answers.	

- (b) The W3C has produced a set of standards. Describe **two** ways in which a designer could develop a web page for an international audience. (4 marks)

Description	Marks
Two ways (x 2 marks each)	
Describes a feature for international audiences	2
Provides a general comment about a feature for an international audience	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> adjust the reading gravity of the webpage to fit reading styles of other cultures have a currency converter for different currencies reduce the use of idioms and cultural slang in the text for ease of understanding/reading for all users check that symbols and graphics used are not culturally specific or have different associated meanings to avoid misunderstanding formatting of names is in line with cultural rules so that users are not offended the use of appropriate images and graphics with an understanding of religious and cultural sensibilities. 	
Accept other relevant answers.	

Question 18

(4 marks)

(a) Define data mining.

(1 mark)

Description	Marks
Correctly defines data mining	1
Total	1
Answers could include: <ul style="list-style-type: none"> The process of analysing large sets of data to find patterns, trends or new information that can be beneficial to businesses. Accept other relevant answers.	

(b) Explain how a business could use data mining.

(3 marks)

Description	Marks
Explains how a business could use data mining to create knowledge that can be used to help make business decisions	3
Describes how data mining could be used without explicitly linking to how it can be used by businesses	2
Identifies an example of data mining	1
Total	3
Answers could include: <ul style="list-style-type: none"> Stock – Data mining allows a business to examine sales patterns and trends to determine what is currently in store and what needs to be reordered. This helps business efficiency so that stocks are not over/under supplied and costs are kept under control. Customers can be assured that stock is available when required. Customer habits – Data mining allows a business to determine time periods when consumers are more likely to spend – such as late night or weekend. This helps the business organise for stock availability and staffing to cope with numbers of customers. Customers benefit from stores having adequate supplies and staff to process transactions. Advertising/marketing – Data mining allows a business to develop target audience profiles so that they can cater their advertising and marketing to specific consumer groups. This helps the business to increase market base and profits. Customers may purchase additional/new items or offer loyalty to the business. Accept other relevant answers.	

Question 19

(10 marks)

- (a) Describe **two** ways in which the use of digital communication could enhance the university's provision of learning materials. (4 marks)

Description	Marks
Two ways (x 2 marks each)	
Describes a way that digital communication could enhance the university's provision of learning materials	2
Provides a general comment about a way that digital communication could enhance the university's provision of learning materials	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • online testing: reduced marking costs for the university • advances in streaming/file compression technology: provides faster data transfer • educational use of social media: improved communication • multimedia software: improved learning materials created by the academic staff • provision of resources/lectures 24/7 for accessibility. 	
Accept other relevant answers.	

- (b) Describe **two** issues that the university would need to address with its online system to ensure that it met appropriate accessibility guidelines. (4 marks)

Description	Marks
Two issues (x 2 marks each)	
Describes an issue to be addressed to meet online accessibility guidelines	2
Provides a general comment about an issue to be addressed to meet online accessibility guidelines	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • cater for sight impaired with appropriate text/background colour scheme or font magnification option to ensure appropriate readability • cater for the hearing impaired by providing transcripts/captions for audio material • cater for ESL users with language translation options • cater for users with limited bandwidth by providing options for download of media or streamed material • ensure appropriate browser capability for users with different preferences • cater for motor impaired by offering voice recognition. 	
Accept other relevant answers.	

- (c) Identify **two** implications of virtual collaboration for Varsity Site students completing its courses. (2 marks)

Description	Marks
Any two of: <ul style="list-style-type: none"> require a device and adequate digital literacy skills to navigate to collaboration spaces and/or locate materials require an Internet connection with a high bandwidth reliable connection to participate in collaboration reliability of students to complete collaboration tasks by set dates cyberbullying/exclusion of some students by others increased digital divide. 	1–2
Total	2
Accept other relevant answers.	

Question 20 (7 marks)

- (a) Outline the concept of intellectual property in Australia. (1 mark)

Description	Marks
Answers could include: <ul style="list-style-type: none"> protects rights/ideas of creators of works protects creators of original works/ideas, encouraging them to continue their creativity legal protection for creators of works which includes patents, trademarks, registered designs and copyright. 	1
Total	1
Accept other relevant answers.	

- (b) Identify **three** types of intellectual property. Provide an example of how each can be breached in relation to digital products. (6 marks)

Description	Marks
Three types identified (x 1 mark each)	
Identifies one to three types of intellectual property	1–3
Subtotal	3
Three examples (x 1 mark each)	
Provides one example of how each intellectual property can be breached	1–3
Subtotal	3
Total	6
Answers must include identification of any three of the following: <ul style="list-style-type: none"> Copyright – the exclusive right to original expression of idea Copying software/content without permission e.g. software program Patent – the exclusive right to how something works or functions Using software/hardware design without permission e.g. operating system Trademark – the exclusive right to use a name or image Using product/company names without permission e.g. logo Registered design – the exclusive right to use a visual appearance of something Using designs without permission e.g. iPod. 	
Accept other relevant examples stated for each intellectual property.	

Question 21

(6 marks)

- (a) Identify **two** reasons why an organisation would have a workplace code of conduct. (2 marks)

Description	Marks
Identifies one to two suitable reason(s) why an organisation would require a workplace code of conduct.	1–2
Total	2
Answers could include: <ul style="list-style-type: none"> • maintain and develop standard behaviours in the workplace • to help employees understand acceptable behaviour in the workplace • helps clarify an organisation mission and goals • a code of conduct supports day to day decision making for employees • a code of conduct is a form of compliance • a code of conduct helps identify unacceptable behaviours and work practises in order to mitigate risks in the workplace for employees and employers. 	
Accept other relevant answers.	

- (b) Describe **two** reasons why a business might monitor an employee’s emails and/or internet use. (4 marks)

Description	Marks
Two reasons (x 2 marks each)	
Describes why a business might monitor an employee’s emails and/or Internet use	2
Provides a general comment about the monitoring or emails and/or Internet use	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • to reduce anti-social behaviour such as bullying and intimidation so that employees have a safe and inclusive working environment • to prevent inappropriate use of workplace resources so that costs associated with internet usage and data storage are reduced • to protect sensitive information from employees viewing it without authorisation • to increase productivity by checking that employees are using their time wisely • to protect the organisation from legal issues arising from the misuse of communication technologies and other legislation such as copyright and intellectual property. 	
Accept other relevant answers.	

Question 22

(9 marks)

The company has asked you to identify **three** important components of these devices. Describe why each component would be an appropriate choice for its employees and how it will affect the usability of the device.

Description	Marks
Three components:	
Identifies any three of: <ul style="list-style-type: none"> • CPU • primary memory (RAM) • secondary storage • monitor • GPU 	1–3
Subtotal	3
Three components (x 2 marks each)	
Describes why the component identified would be an appropriate choice for the multimedia creators and how it will affect the usability of the device for the creators.	2
Provides general comment/s about the component identified without linking it to why it would be appropriate or the usability for the creators.	1
Subtotal	2
Total	9
<p>Answers could include:</p> <ul style="list-style-type: none"> • CPU A powerful CPU would be required for the multimedia creators as they often work using multiple programs at the same time or they work on a task that requires a powerful CPU such as rendering large video files. • Primary memory (RAM) A multimedia creator would require large primary memory capacity to ensure fast refresh rates and having multiple working files open simultaneously. • Secondary storage A multimedia creator uses large files and would require high capacity secondary storage space to ensure they can store these files. • Monitor Multimedia creators require a large monitor as the products they use often have many sections that need to be on the screen, for example a multitrack video editor would need to be able to preview the video, manipulate the timeline and effects, etc. Multimedia creators may be manipulating large images files that require a high resolution. • GPU Multimedia creators are likely to be using a large, high resolution monitor or multiple monitors to complete work effectively. A powerful graphics card will assist in processing the graphical elements to support the work of the creators. 	
Accept other relevant answers.	

Question 23

(6 marks)

When doing research for an assignment, you are trying to ensure that all the information you are considering is current, accurate and verifiable. Describe what you should be looking for to ensure your information is:

- current
- accurate
- verifiable.

Description	Marks
Three information types – current/accurate/verifiable (x 2 marks each)	
Describes features that make information current/accurate/verifiable	2
Identifies a characteristic of current/accurate/verifiable information	1
Subtotal	2
Total	6
<p>Answers could include:</p> <p>Current:</p> <ul style="list-style-type: none"> • The information needs to be current if it is to be relied on, older articles of data may be inappropriate/outdated. • Current data requires context – for example if searching for current events or medical advancement it is important to ensure the information is up to date or recently released as well as being accurate and verifiable. <p>Accurate:</p> <ul style="list-style-type: none"> • The information should be accurate or correct. Accurate information should be statements of fact and not opinions or editorials. • To determine if your information is accurate you may need to view sources and determine if they are verifiable. <p>Verifiable:</p> <ul style="list-style-type: none"> • When searching for information you should be able to verify that the information comes from a reputable source, such as a respected University, peer reviewed article or trusted news source. • If you cannot identify the author of the information or it comes from a non-verified website, you should not trust the information. 	
Accept other relevant answers.	

Section Three: Extended answer

20% (43 Marks)

Question 24

(43 marks)

- (a) Plumbers Galore has recently created a disaster recovery plan. Describe **two** benefits to the business by creating such a plan. (4 marks)

Description	Marks
Two benefits (x 2 marks each)	
Describes a benefit to the business of creating a disaster recovery plan	2
Provides a general comment about a benefit to the business of creating a disaster recovery plan	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • data can be recovered easily so that normal business practises can be resumed as soon as possible in order to minimise a loss in revenue in case of a disaster • less downtime if a disaster occurred, which means Plumbers Galore can minimise their costs by not having to 'replace' lost data • a disaster recovery plan (DRP) helps Plumbers Galore understand their network functions and network security, in order to reduce their risks. 	
Accept other relevant answers.	

- (b) Most of Plumbers Galore's customers pay via the mobile platform. Outline **three** ways in which Plumbers Galore can provide secure online payment for its customers. (6 marks)

Description	Marks
Three ways (x 2 marks each)	
Outlines a way Plumbers Galore can provide secure online payment options	2
Identifies a way Plumbers Galore can provide secure online payment options	1
Subtotal	2
Total	6
Answers could include: <ul style="list-style-type: none"> • Plumbers Galore could have a separate network for all online payments, with access limited to a few authorised staff members to reduce unauthorised access • use the network protocol HTTPS for online payments to reduce risk of transactions being intercepted • use encryption to provide transaction security between Plumbers Galore and customers • ensure that all staff regularly change passwords to the reduce risk of unauthorised people gaining access to customer details • provide PayPal for their customers to minimise transactions being intercepted • keep their anti-virus and malware up to date to ensure that they don't get hacked • secure all mobile devices by using string passwords and two factor authentication system in case one of these devices goes missing or is stolen whilst on a job • install a firewall on the network to prevent unauthorised users from hacking or accessing data. 	
Accept other relevant answers.	

Question 24 (continued)

- (c) (i) Provide **two** characteristics of each of the following network communication standards. (4 marks)

Description	Marks
Two communication standards (x 2 marks each)	
Provides two characteristics of the communication standard	2
Provides one characteristic of the communication standard	1
Subtotal	2
Total	4
<p>Answers could include:</p> <p>802.3 (Ethernet)</p> <ul style="list-style-type: none"> uses cables to connect devices allowing for faster more reliable connectivity uses a logical topology enabling efficient delivery of data reduces mobility of devices however allows for transfer of larger files without timing out. <p>802.11x (Wireless)</p> <ul style="list-style-type: none"> Used over a small geographical area – it is a communication standard developed for wireless LAN technology Used by mobile devices on a network - communication between wireless client and a base station or two wireless clients Range of frequency bands - communication in 2.4, 3.6, 5 and 60 Ghz. <p>Accept other relevant answers.</p>	

- (ii) Identify the communication standard that would be most appropriate for the administration staff to connect the Plumbers Galore network and justify your choice. (3 marks)

Description	Marks
Identifies the communication standard that would be the most appropriate in this situation: 802.3 (Ethernet) or 802.11x (Wireless)	1
Subtotal	1
Justifies why the identified communication standard would be the most appropriate option for the administration staff of Plumbers Galore	2
Provides a general comment about why the identified communication standard would be required by the administration staff of Plumbers Galore	1
Subtotal	2
Total	3
<p>Answers could include:</p> <p>Administration staff require fast Internet speeds and high bandwidth to contact mobile servicing vans and process online payments from customers. Ethernet would be able to deliver the required network capacity reliably.</p> <p>Accept other relevant answers</p>	

(d) Describe **two** security measures that will assist in protecting the network. (4 marks)

Description	Marks
Two security measures (x 2 marks each)	
Describes how the security measure will assist in protecting their network	2
Provides a general comment about a feature of network security	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • Firewall A firewall can prevent unauthorised access to the network from outside the network. The firewall inspects packets as they try to enter the network and unless they meet the rules to enter, they will be refused. • Passwords Passwords can prevent unauthorised access to the network from devices in range of a network who don't know the password. This ensures only authorised people are able to access the network and the data/resources available on the network. • Physical security Can prevent unauthorised people from getting access to networking equipment to prevent the devices from being tampered with. Locks on doors can prevent access while keeping the network working effectively. 	

(e) Describe **two** benefits that emerging technologies could provide for Plumbers Galore staff and/or potential customers. (4 marks)

Description	Marks
Two benefits (x 2 marks each)	
Describes a benefit about how Plumbers Galore and/or potential customers could use emerging technologies	2
Provides a general comment about a benefit of emerging technologies for staff and/or potential customers of Plumbers Galore	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • potential customers can go on a virtual tour of the showroom and examine different design choices before they purchase • Plumbers Galore can use customers data to see what customers like and want in order to help them expand and adapt their business based on these needs • Plumbers Galore can incorporate interactive chats and online 24/7 communication means to lure customers, and offer them incentives such as discount and special offers etc • Smart and home office systems could benefit business by a more connected and smart system; ambient lighting in an office and showroom • Solar/renewable technology could lower costs i.e. electric vehicles (vans) and solar panels on the roof could eliminate fuel costs and lower electricity bill. Accept other relevant answers.	

Question 24 (continued)

- (f) (i) Describe **two** productivity impacts for Plumbers Galore employees. (4 marks)

Description	Marks
Two impacts (x 2 marks each)	
Describes a productivity impact for Plumbers Galore employees	2
Provides a general comment on a productivity impact for Plumbers Galore employees	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> improved quality of repairs due to diagnostic equipment used to analyse problems leading to more jobs being booked reduction in time spent on each job due to reliability and complexity of equipment more efficient travel routes to jobs due to GPS navigation enabling employees to arrive at jobs using a more direct travel route. 	
Accept other relevant answers.	

- (ii) Describe **two** impacts of access to knowledge or resources for Plumbers Galore employees. (4 marks)

Description	Marks
Two impacts (x 2 marks each)	
Describes an impact of digital technologies on access to knowledge or resources for Plumbers Galore employees	2
Provides a general comment on the impact of digital technologies on access to knowledge or resources for Plumbers Galore employees	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> employees can provide quotes more accurately and efficiently to customers by accessing up to date price lists through mobile devices employees can order and monitor delivery of stock using online facilities and tracking methods employees can access customer contact details quickly through shared database records. 	
Accept other relevant answers.	

- (g) Describe **three** reasons why Plumbers Galore should consider using a content management system (CMS) for its business website. (6 marks)

Description	Marks
Three reasons (x 2 marks each)	
Describes a benefit to Plumbers Galore from using a Content Management System (CMS)	2
Provides a general comment about a benefit of using a Content Management System (CMS)	1
Subtotal	2
Total	6
Answers could include: <ul style="list-style-type: none"> • CMS do not require Plumbers Galore office staff to have specific technical skills or coding expertise, which means Plumbers Galore can save money on training staff. • staff at Plumbers Galore can easily make changes to their mobile and web platforms minimising time taken to keep these up to date • little downtime is required to make changes which means Plumbers Galore website and business can resume normal business practices • a CMS will allow Plumbers Galore web content to be updated, modified and or edited by their administrative staff, rather than then having to outsource this task to an external vendor, which will save them money. • Plumbers Galore will retain control of their website content, which reduces the risk of sensitive or personal data being lost • Plumbers Galore and can easily make design changes to their web content, in order to make their website more dynamic, and interactive, as well as run promotions and sales. 	
Accept other relevant answers.	

- (h) With increasing reliance on connectivity and reliability of online services, Plumbers Galore have realised its current Internet Service Provider (ISP) agreement is outdated. Outline **two** features that Plumbers Galore should take into account for a new agreement to ensure its business needs are met. (4 marks)

Description	Marks
Two features (x 2 marks each)	
Outlines a feature of the ISP agreement that Plumbers Galore should consider to ensure business needs are met	2
Provides a general comment on a feature of the ISP agreement that Plumbers Galore should consider to ensure business needs are met	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • availability of service – Plumbers Galore will need to ensure that online services are available during their work hours to provide fast and efficient service for administration, website/mobile application connectivity, on-road vans and customer services to ensure smooth operation of their business. • types of services – Plumbers Galore will need to ensure that online services provide adequate speeds for mobile and office connectivity and that these speeds are within the agreed range with their provider. 	
Accept other relevant answers.	

Section Four: Scenario

40% (67 Marks)

Question 25

(67 marks)

- (a) When designing websites, an important consideration is the organisation of the content. Identify and outline **two** methods of organising content. Use an example of each method in your answer. (6 marks)

Description	Marks
Identifies one to two methods of organising content: <ul style="list-style-type: none"> logical hierarchical 	1–2
Subtotal	2
Two methods (logical/hierarchical) (x 2 marks each)	
Outlines clearly a logical/hierarchical method of organising content using an example	2
Makes a general comment about logical/hierarchical method of organising content using an example	1
Subtotal	2
Total	6
Answers could include: <ul style="list-style-type: none"> Logical – this is where websites have information presented in a sequence such as alphabetically, topics or chronologically. An example is a training site where the user moves through a progression of set information, such as a learning tutorial. Hierarchical – is when information is accessed from a homepage with links/menus. An example is a company or school site, providing a range of menus for the user to locate specific information. 	
Accept other relevant answers.	

- (b) Explain how you intend to incorporate the following help features into the design of your website. (6 marks)

Description	Marks
Two help features (x 3 marks each)	
Explains how the usability/inclusivity feature will be incorporated into the design of their website	3
Outlines how the feature will be incorporated into the design of their website	2
Makes superficial comment/s about the concept in relation to the design of their website	1
Total	6
Answers could include: <ul style="list-style-type: none"> Usability – settings tab/button which allows users to change preferences to suit their needs, e.g. contrast, time zone; Search bar that is easily located and recognised to allow users to locate specific information, categorised content for mobile responsiveness Inclusivity – including design features to ensure that everyone can access the site and features regardless of their geographical location, education, language and technology e.g. options to change the language and currency; translation features; responsive design; low bandwidth connections; available on multiple devices. 	
Accept other relevant answers.	

- (c) Describe how **three** publishing features will be used in the construction of your website. (6 marks)

Description	Marks
Three correct publishing features (x 2 marks each)	
Describe using relevant comments about how the publishing feature could be used in the design of the website	2
Makes relevant comments about how the publishing feature could be used in the design of the website	1
Subtotal	2
Total	6
Answers could include: <ul style="list-style-type: none"> • Colour schemes – the combination of different colours to provide impact and a positive user experience e.g. complimentary, analogous, triad colour schemes; improves readability, legibility, consistency and accessibility; can be set using CSS so colour schemes between pages are consistent • Layers – allows for manipulation of objects for easier placement and manipulation e.g. deliver control over structure; ensure that different layers can be worked on simultaneously; enable different properties to be set for different layers; allow for individual layers to be locked or frozen • Frames – allows for the placement of text, images, video within the website; provides ease of use when adjusting and finalising the position of content • Typography – affects readability, ease of communication, impact and user experience; promotes a particular emotion or style e.g. format, typeface, alignment, size and spacing • Templates – allows for consistency/uniformity between pages; users know where items are likely to be located on each page – familiarity; can assist to build website more efficiently; ease of updating data to maintain website • Print/display option – quality of graphics/videos; use of PDF format for ease of transferring files; use of W3C standards so website appears the same regardless of device or browser; responsive design 	

- (d) Outline **two** ways in which you could include user-generated content in your website. (4 marks)

Description	Marks
Two ways (x 2 marks each)	
Outlines a way that user-generated content can be incorporated into the website	2
Provides general comments about a way that user-generated content can be incorporated into the website	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • Comments – allowing users to post comments onto the website to allow collaboration and the sharing of ideas/experiences • Reviews – users could rate the regeneration activities • Image sharing – users could share photographs of the regeneration activities and progress. 	
Accept other relevant answers.	

Question 25 (continued)

- (e) Design the website homepage for Green Aussie in the space provided on pages 24 and 25. You may use the space below to plan your design.

Your design must include annotations and show

- (i) layout and structure of your intended design. (5 marks)

Description	Marks
Layout and structure of design	
Produces an effective drawing/representation of the layout and structure of the website that includes detailed, supporting annotations	5
Produces an appropriate drawing/representation of the layout and structure of the website that includes some supporting annotations	4
Produces a rudimentary drawing/representation of the layout and structure of the website that includes some relating annotations	3
Produces a simplistic drawing of the layout and structure of the website that includes limited annotations	2
Produces a limited drawing of the layout and structure of the website that has inadequate or no annotations	1
Total	5

- (ii) elements and principles of design used and the relationship between them. (3 marks)

Description	Marks
Elements and principles of design used and the relationship between them	
Produces a design that indicates clearly the elements and principles of design used, the relationship between them and that includes supporting annotations	3
Produces a design that features some of the elements and principles of design used, some description of the relationship between them and that includes some relating annotations	2
Produces a design where some of the elements and principles of design have been used but the relationship between them is unclear and the design has inadequate or no annotations	1
Total	3

- (iii) organisation of content suitable for the given digital medium. (3 marks)

Description	Marks
Organisation of content suitable for the given digital medium	
Produces a design that features logical and practical organisation of content suitable for the given digital medium and that includes supporting annotations	3
Produces a design that shows some practical organisation of content suitable for the given digital medium and that includes some relating annotations	2
Produces a design that shows limited organisation of content for the given digital medium and that has inadequate or no annotations	1
Total	3

- (iv) navigation controls suitable for the given digital medium. (2 marks)

Description	Marks
Navigation controls suitable for the given digital medium	
Produces a design that shows suitable navigation controls for the given digital medium and that includes some relating annotations	2
Produces a design that shows limited navigation controls for the given digital medium and that has inadequate or no annotations	1
Total	2

- (v) a help feature that allows accessibility. (2 marks)

Description	Marks
Help feature for accessibility	
Produces a design that clearly indicates accessibility. Annotation is used to explain feature	2
Includes an accessibility feature in the design but is not clearly annotated. Or not relevant to the given digital medium	1
Total	2

- (f) Many organisations use in-house staff to design its logo and website. Provide **two** reasons why Green Aussie may have chosen to outsource these designs to you. (4 marks)

Description	Marks
Two reasons (x 2 marks each)	
Provides a reason why a business might outsource the designs of its logo and website	2
States a general comment about a reason why a business might outsource the designs of its logo and website	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • A business may not have staff with the expertise to design the logo and website; and would remove staff from their existing tasks • It may be cheaper for the business to outsource than train their existing staff or employ additional staff • The business can focus on its core business and not incur costs for resources • The business will not need to purchase additional software/resources required for designing the logo and website 	
Accept other relevant answers.	

Question 25 (continued)

- (g) Describe **two** convergence trends in contemporary digital technologies that you could consider in the design of your mobile application. (4 marks)

Description	Marks
Two impacts (x 2 marks each)	
Describes a convergence trend on the design of the mobile application	2
States a general comment about a convergence trend on the design of the mobile application	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • Hardware e.g. use of camera to collect evidence of regeneration data and sending this through the application to Aussie Green • Communications e.g. use of interactive maps and GPS to show the locations of regeneration activities • Software e.g. incorporating ability to add/receive volunteer posts from social media into the application. 	
Accept other relevant answers.	

- (h) You are required to design the main screen of the application in the space provided on page 29. You may use the space below to plan your response.

Your design must include annotations and show

- (i) layout and structure of your intended design. (5 marks)

Description	Marks
Layout and structure of design	
Produces an effective drawing/representation of the layout and structure of the application that includes detailed, supporting annotations	5
Produces an appropriate drawing/representation of the layout and structure of the application that includes some supporting annotations	4
Produces a rudimentary drawing/representation of the layout and structure of the application that includes some relating annotations	3
Produces a simplistic drawing of the layout and structure of the application that includes limited annotations	2
Produces a limited drawing of the layout and structure of the application that has inadequate or no annotations	1
Total	5

- (ii) the elements and principles of design used and the relationship between them. (3 marks)

Description	Marks
Elements and principles of design used and the relationship between them	
Produces a design that indicates clearly the elements and principles of design used, the relationship between them and that includes supporting annotations	3
Produces a design that features some of the elements and principles of design used, some description of the relationship between them and that includes some relating annotations	2
Produces a design where some of the elements and principles of design have been used but the relationship between them is unclear and the design has inadequate or no annotations	1
Total	3

- (iii) organisation of content suitable for the given digital medium. (3 marks)

Description	Marks
Organisation of content suitable for the given digital medium	
Produces a design that features logical and practical organisation of content suitable for the given digital medium and that includes supporting annotations	3
Produces a design that shows some practical organisation of content suitable for the given digital medium and that includes some relating annotations	2
Produces a design that shows limited organisation of content for the given digital medium and that has inadequate or no annotations	1
Total	3

- (iv) navigation controls suitable for the given digital medium. (2 marks)

Description	Marks
Navigation controls suitable for the given digital medium	
Produces a design that shows suitable navigation controls for the given digital medium and that includes some relating annotations	2
Produces a design that shows limited navigation controls for the given digital medium and that has inadequate or no annotations	1
Total	2

- (v) user-generated content feature(s) suitable for the given digital medium. (2 marks)

Description	Marks
Allocates a position and reason for user-generated content	
Produces a design that clearly indicates position of user-generated content and annotates a reason for choice	2
Produces a design that only indicates the position with no reason	1
Total	2

Question 25 (continued)

- (i) Explain how you have considered the appearance of the user interface (UI) and structure in the design and application of your website. (4 marks)

Description	Marks
Appearance of user interface (UI) and structure (x 2 marks each)	
Explains how they applied the appearance consideration of the UI/structure in the design and the application of the website	2
Makes a general comment about the appearance consideration of the UI/structure in the design and application of the website	1
Subtotal	2
Total	4
Answers could include: <ul style="list-style-type: none"> • User interface – website (more colour range, larger images, video, multiple links, careful placement of text/items to help increase readability and engagement); application (uncluttered, clear consistent layout, simple navigation, use typography to create hierarchy and clarity) • Structure – website (hierarchical structure, standard navigational links, link to homepage, site mapping to outline the website’s structure and navigation scheme); application (‘Jump to’ section, simple layout, icon based, responsive, customisation, use phone features e.g. GPS, camera). Accept other relevant answers.	

- (j) The director of Green Aussie would like to investigate the creation of its website using an online tool. State the purpose of online software tools and describe a way that these could assist Green Aussie in the creation of its website. (3 marks)

Description	Marks
Purpose:	
States the purpose of online software tools	1
Subtotal	1
How assist:	
Describes a way that online software tools can assist in the creation of websites/applications	2
Provides a general comment about a way that online software tools can assist in the creation of websites/applications	1
Subtotal	2
Total	3
Answers could include: <p>Purpose:</p> <ul style="list-style-type: none"> • to create files without the need for installing software onto a device • ability to create files from any device with an Internet connection. <p>Assist by:</p> <ul style="list-style-type: none"> • providing templates with image/text frames to allow for website/application creation without the need for coding and pages will all have a common look and feel • ease of publishing – providing a link for the website that can be easily shared with others • tutorials/forums available for support when creating websites/applications to assist the creator with instructions and problem-solving. Accept other relevant answers.	

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