

**IMIS DIPLOMA QUALIFICATIONS****Website Development  
(D4)****Thursday 5<sup>th</sup> June 2015 14:00hrs – 17:00hrs****DURATION: 3 HOURS****SOLUTIONS & MARKING SCHEME****Question A1**Give and describe **TWO** new features of HTML5. LO1 AC1.1 AC1.2 T1-P14

(5 marks)

Answer

Any **TWO** of the following features are acceptable:

- Logical layout elements such as <nav>, etc
- Elements design for different types of rich media including <video> and <audio>
- Animation that plays directly in the browser window without plug-ins using the new <canvas> element
- Support for applications in the browser, including drag and drop, local data storage, and background data processing

*2\*3 marks to a max of 5 marks***Question A2**

A traditional way of processing forms on the Internet is to use the CGI (Common Gateway Interface). Briefly explain how the CGI functions. LO2 AC2.1 T1- P433

(5 marks)

Answer

The CGI is the communications bridge between the Internet and the server. Using script programs CGI can collect data sent by the user via the HTTP and transfer it to a variety of data processing programs running on the server. This software can work with the data and send a response back to the CGI, and then onto the user.

*5 marks for a complete response else pro rata.***Question A3**There are **FIVE** Image Elements. Describe **TWO** of the elements showing how important they are in displaying an image. LO2 AC2.3 T1-319

(5 marks)

Answer

Any **TWO** of the five elements are acceptable:

1. Alt – display text when the mouse is pointing to the image, when the graphics function has been switched off, or when the browser is text only.
2. Height – specifies the height of the image in pixels.
3. Src – the url/address of the graphic file.

4. Title – text that provides information about the image.
  5. Width – specifies the width of the image in pixels.
  6. Partially sighted users operating in text aloud mode
- 2\*3 marks to a max of 5 marks*

**Question A4**

Give and describe **TWO** reasons why designers of your website should test their website. LO3 AC3.2 AC3.3 T1-129 (5 marks)

Answer

Any TWO of the following elements are acceptable:

The designers will:

- Attempt to crash the website.
- Have a different way of using the website.
- Read the text and pick up any mis-spellings.
- Could query the structure/logic of the statements.
- Comment on the overall layout of the website.
- etc

*2\*3 marks to a max of 5 marks*

**Question A5**

When designing a set of test data give and explain **TWO** considerations that must be taken into account. LO3 AC3.1 AC3.2 AC3.3 T1-130 (5 marks)

Answer

Any TWO of the following elements are acceptable:

- Valid data – to make sure that the result is correct.
- Invalid data – to ensure that the invalid data is blocked.
- Extreme data – to see what happens, and if it is acceptable at the margins.
- All paths are tested – it is possible to go to a page, and it is the correct page.
- Etc.

*2\*3 marks to a max of 5 marks*

**Question A6**

Give and describe **TWO** benefits of using a Cascade Style Sheet (CSS) when creating a website. AC4 AC4.2 AC5.2 T1-137 (5 marks)

Answer

Any TWO of the following elements are acceptable:

- Standards are followed.
- Easy for other programmers to amend.
- Good training for programmers.
- Consistency
- Etc.

*2\*3 marks to a max of 5 marks*

**Question A7**

Give and describe **TWO** reasons why it is good practice to define a background colour even when the proposed background colour is to be white. LO5 AC5.1 AC5.2 T1- P342 (5 marks)

Answer

Any TWO of the following elements are acceptable:

- Standards are followed.
- Consistency throughout the website
- Default colours are not used.
- If the screen does not accept the colour the best fit will apply rather than default values.
- If the user is colour-blind hopefully only one set of commands have to be altered.
- Etc.

*2\*3 marks to a max of 5 marks*

**Question A8**

Give and describe **TWO** types of error recovery that must be included in the Error Recovery Section of the Website documentation. LO6 AC6.2 AC6.3 T3-230. (5 marks)

Answer

Any TWO of the following elements are acceptable:

- System errors where perhaps the system/configuration is not suitable/compatible.
- Disaster recovery – whom to contact and where.
- Data errors to explain why they have not been accepted.
- Blank fields – what data should have been entered.
- Etc.

*2\*3 marks to a max of 5 marks*

**Question B9**

When creating an Input Object form there are various Type Attribute Values that can be used on the Input Object form.

Give and describe **FOUR** attributes you would use, and explain why you would use them. AC2.3 T1-P435 (20 marks)

Answer

Any FOUR of the following elements are acceptable:

- Text – this lets the user enter text in the form. This allows the user to enter text such as addresses, comments, etc
- Password – same as for text but the entry field is masked by asterisks. This allows the user to enter their password to be able to proceed and perform the next task.
- Checkbox – a toggle box that is click for whatever reason. This allows the user to select a response, saves having to type in a long response, used as an acknowledgement key such as an agreement, saves having to type in a long response
- Radio – lets the user choose one value from a selection of values. This allows the user to select a response.
- Submit – to submit the form this button must be pressed. This allows the user to submit the form.
- Reset – lets the user cancel all the input and restart again. This allows the user perhaps cancel the process, or start again.
- Hidden – this is a control that is hidden from the user so that additional information is sent. Perhaps user to set up the dreaded cookies, viruses etc.
- Image – enables an image to be displayed. This image may save the originator have to type text in, and allows the user to recognise the required option from a selection.
- Button – create a button that has no default behaviour.
- File – lets the user select a file that is submitted with the form. This allows the user to add attachments to the form.

*4\*(2 marks for an attribute + 3 marks for a usage)*

**Question B10**

The website has been tested, uploaded, and is now running live. You need to develop a Feedback Form for users to complete should there be any errors or inconsistencies with the website.

Give and describe **FOUR** questions you would include in the form so that the errors or inconsistencies can be identified and you can correct them. AC3.4 AC3.5 T1-P130  
(20 marks)

Answer

Any FOUR of the following elements are acceptable, and at depth to gain the full marks:

- Did you find the information you needed?
- Was it was easy or difficult to access the information you needed?
- Did you find the website visually attractive?
- Did you find the content easy to read?
- Did you find the website easy to navigate?
- Did you think the information was presented correctly?
- Did the information have enough depth?
- What area of the site did you like the best? Why?
- What area of the site did you like the least? Why?
- Would you recommend the website to others?
- Etc.

*4\*5 marks for a complete response.*

**Question B11**

Effective navigation includes providing not only links to other pages in the website, but also to other websites.

Give and describe **FOUR** considerations you need to consider when designing a website to enable a user to navigation to other pages in the website and other websites. AC4.1 T1-P360  
(20 marks)

Answer

Any FOUR of the following elements are acceptable, and at depth to gain the full marks:

- Should the link be graphic or text – are graphics easier to ‘read’?
- Are they easily located – does the user have to search, or page scroll, to find the link?
- Are the text pages to be long and just jump to the section, or should they be on separate pages?
- Are the most used/obvious to be on the home page?
- Will you be consistent when designing/creating links?
- Will you be consistent when placing links, such as bottom/side of the page?
- Etc.

*4\*5 marks for a complete response.*

**Question B12**

When selecting a Web Hosting Service you must compile a comparison checklist.

Describe **FOUR** questions, and why they should be asked, that you would include on the comparison checklist to be asked when selecting a Web Hosting Service. LO5 AC5.1 AC5.3 P126 (20 marks)

Answer

Any FOUR of the following questions are acceptable, and at depth to gain the full marks:

- Is the web host local or national?
- What is offered in the package (disk storage, limits of up/downloads)?
- Are there bandwidth limits for the number of visitors the site receives per month?
- Do you offer technical support, and to what level?
- How many e-mail addresses do you get with an account?
- Do you provide software such as File transfer Protocol (FTP)?
- Do you support the latest connect technologies?
- Do you offer enhanced services, such as Structured Query Language (SQL), Secure Socket Level (SSL), etc?
- Etc.

*4\*5 marks for a complete response.*

**Question B13**

Disaster Recovery can be a stressful event. To help the user describe **FOUR** Technical Documentation tasks that has to be carried out to recover from the disaster. AC6.2 T3-2 (20 marks)

Answer

Any FOUR of the following questions are acceptable, and at depth to gain the full marks:

- Switch off electricity, gas, water, etc. to ensure safety.
- After checking the safety switch on electricity, gas, water, etc.
- Check the serviceability of the hardware.
- Attempt to reboot the system.
- Check the suitability of the on-site backups.
- Check the suitability of the off-site backups.
- Install the backups
- Run appropriate diagnostics
- Book relevant appointments for a thorough check of the hardware, software, and premises.
- Etc

*4\*5 marks for a complete response.*