

National College of Ireland

BSc (Hons) in Computing, Year 1 - BSHC
BSc (Hons) in Business Information Systems, Year 1 – BSHBIS
Higher Certificate in Science in Computing, Year 1 - HCC
BA (Ord) in Management of Technology in Business, Year 1 - BAMTB
BSc (Hons) in Computing (Evening), Year 1 - BSHCE
BSc (Hons) in Business Information Systems (Evening), Year 1 – BSHBISE
Higher Certificate in Science in Computing (Evening), Year 1 – HCCE
Certificate in Web Development, Year 1 - CWEBD

Semester One Examinations – 2011/2012

**Wednesday 18th January, 2012
2.00pm – 3.30pm**

XHTML & Web Design

Mr. Tom Nolan, Mr. Ciaran O’Leary, Dr. Thomas Newe
Ms. Victoria Macarthur

Answer All of Section A and one question from Section B

Duration of exam: 1 ½ hours

Attachments: Appendix A

Section A

50 marks

Answer all of the following questions in Section A

Question 1 [50 marks]

- (a) Give the XHTML/CSS markup required to make an **image** a **link** in your web page. Specify the width and the height of the image.

[10 marks]

- (b) What is the XHTML/CSS code needed to recreate the following:

This paragraph contains a break and text that is **bold**, **underlined** and ***italic***.
Can you ensure that it is nested properly?

[10 marks]

- (c) Explain **five** differences between HTML and XHTML.

[10 marks]

- (d) Write the markup required to reproduce the **table** illustrated below:

Profit	Loss	Total
100	200	-100
Money owed		100

[10 marks]

(e) JavaScript can be used to make web pages more dynamic. Using **JavaScript code**, how would you create the following:

- i. Change the background color of the web page. [5 marks]
- ii. Trigger this function when the user clicks a button. [5 marks]

[10 marks]

NCI DOWNLOAD 28.04.13 12:05:04

Section B

50 marks

Answer **one** of the following questions (either Question 2 or Question 3)

Question 2 [50 marks]

(a) Imagine that you are interviewing a client in order to design their web site.

Describe **five** key questions that should be taken into account when planning a web site.

[10 marks]

(b) XHTML requires web developers to create well-formed markup. In order to do this, XHTML can be defined by using three different DTDs.

i. Explain what a **DTD** is and what the three different DTDs that can be used are. [5 marks]

ii. What does the term **validating** an XHTML document mean?

Describe the process that should be followed when validating your web pages. [5 marks]

[10 marks]

(c) Give the code that you think would best replicate the web page in Appendix A

(*Note: You can choose your own color, width, height, and font styles. Underlined text should be a hyperlink to another page in the website).

[30 marks]

Question 3 [50 marks]

(a) In Cascading Style Sheets (CSS), the term "box model" is used when talking about design and layout.

- i. What do you understand by the term "**box model**"? [4 marks]
- ii. Draw a labeled diagram of the box model. [5 marks]
- iii. What is the difference between a **class** and an **id** in CSS? Give example CSS code to explain your answer. [6 marks]

[15 marks]

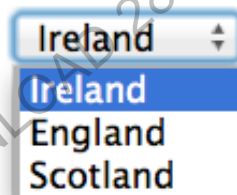
(b) The Web Content Accessibility Guidelines (WCAG) documents how to create accessible websites.

- i. What do you understand by the term "**accessibility**"? [3 marks]
- ii. What are the **four** principles of accessibility? Give a brief description of each. [4 x 3 marks]

[15 marks]

(c) A form has several <input> controls.

- i. Briefly describe the use of **forms**. Explain two ways that form data can be processed. [3 mark]
- ii. Give an example of **three** different types of input tags. Include the necessary attributes and explain how they will appear on the browser window (*Note: You can draw a sketch to illustrate your answer). [3 x 4 marks]
- iii. Write the markup required to reproduce the **dropdown** box illustrated below: [5 marks]



[20 marks]