

W265/105C, W265B/105C, W265C/105C



DUBLIN INSTITUTE OF TECHNOLOGY

---

**DT265/1 Higher Diploma in Computing**  
**DT265B Masters Qualifier for MSc in Computing**  
**DT265C Masters Qualifier for MSc in Computing**

---

WINTER EXAMINATIONS 2015/2016

---

**WEB & USER INTERFACE DESIGN [CMPU4063]**  
[DT265, DT265B, DT265C]

MS. ANDREA CURLEY  
DR. DEIRDRE LILLIS  
DR. MICHAEL O'MAHONY

WEDNESDAY 13<sup>TH</sup> JANUARY

1.00 P.M. – 3.00 P.M.

TWO HOURS

INSTRUCTIONS TO CANDIDATES

Answer question (1) and *any two* of questions (2), (3), (4)

Question (1) is worth **40** marks.

Questions (2), (3), (4) are worth **30** marks each

1. (a) What problems would a HTML validator pick up in the following code?

```
<!DOCTYPE html>
<head>
<title My Web page>
<link href="cssFile.css" type="text/css" >
</head>
<body>
<p>Hello World<br>
</body>
```

(8 marks)

- (b) What is a *CSS (Cascading Style Sheet)* stylesheet and what is it made up of? Use examples to support your answer.

(6 marks)

- (c) Outline two features of CSS3. Use examples of code to support your answer.

(6 marks)

- (d) Name three advantages that layers have over tables.

(6 marks)

- (e) Describe the *humanist* learning theory, using examples to support your answer.

(8 marks)

- (f) Provide three methods of implementing a humanist theory in an interface.

(6 marks)

2. (a) i. In terms of CSS (Cascading Style Sheets), what is the meaning of the *Box Model*? (3 marks)
- ii. Describe how the main properties of the Box Model can be manipulated to alter page layout. Use HTML/CSS code to support your answer. (15 marks)
- (b) Discuss how the **display** property can help with page layout. Use code to support your answer. (12 marks)

3. (a) Describe the six *Gestalt Laws of Perception*. (12 marks)
- (b) Discuss how each of these laws are relevant to interface design? (6 marks)
- (c) Discuss the use of **grids** in web design. (3 marks)
- (d) Describe two grid principles that can be used in web design. (6 marks)
- (e) What is the meaning of the term, *search engine optimisation* (SEO)? (3 marks)

4. (a) Identify four different uses of the *meta tag*. Provide code and describe what the code is doing. (12 marks)
- (b) i. What is a **media query**? (4 marks)
- ii. What are the *components* of a media query? (4 marks)
- iii. Provide some CSS code to illustrate how a media query works. (6 marks)
- (c) What is a **wireframe** and what is its purpose in interface design? (4 marks)