S8265/104C, S8266/104C, S8900/104C

DUBLIN INSTITUTE OF TECHNOLOGY

DT8265/1 Higher Diploma in Computing

DT8266/1 Masters Qualifier for MSc in Computing

DT8900/1 International Pre Masters for MSc in Computing

SUMMER EXAMINATIONS 2015/2016

WEB & USER INTERFACE DESIGN [CMPU4063]

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WEDNESDAY 25TH MAY 9.30 A.M. – 11.30 A.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 is the meaning of the term, *search engine optimisation* (SEO)?

(3 marks)

(b) Describe **four** SEO guidelines that should be employed when designing websites. Use code where necessary.

(8 marks)

(c) Discuss **two** ways in which HTML5 can be used to validate the form. Use examples to support your answer.

(8 marks)

(d) i. There are various choices of *responsive layout* available to a web designer. What are they?

(4 marks)

ii. Discuss the meaning of each choice using code, where necessary, to support your answer.

(8 marks)

(e) Describe **three** guidelines that a user interface designer should use to help memorise a particular interface.

(9 marks)

2. (a) What is the *Document Object Model* in Javascript?

(8 marks)

(b) Write Javascript code, which will change the text of the following layer from "DT265 Semester 1" to "DT8265 Semester 2".

** DT265 Semester 1 **

(6 marks)

(c) Write Javascript code that will change the font-colour of the layer "myParagraph" in 2(b) to blue.

(6 marks)

(d) What is the meaning of *event handling* in Javascript? Use code to support your answer.

(6 marks)

(e) When a link in a web page is hovered over, a message stating "Don't click this link" appears in an alert box. Write the Javascript code for this.

(4 marks)

3. **(a)** What is a *mental model*?

(4 marks)

(b) How are mental models relevant to user interface design? Use examples to support your answer.

(6 marks)

(c) Discuss the term *flat user interface design*. Use examples to support your answer.

(8 marks)

(d) What are the *two* **advantages** and *two* **disadvantages** of flat user interface design.

(12 marks)

4. **(a)** Describe the **four** types of CSS. Use code to support your answer.

(12 marks)

(b) The CSS positioning properties allow you to position an element. Discuss the **four** positioning methods using code to support your answer.

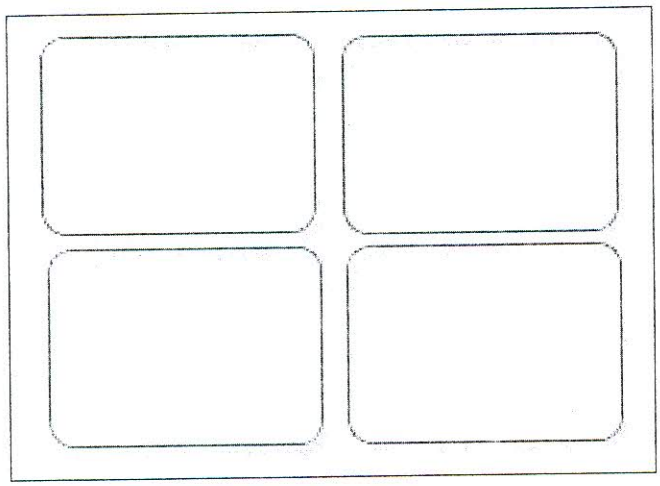
(8 marks)

(c) Write the code for a horizontal navigation menu, using an unordered list (using CSS and HTML where necessary).

(6 marks)

(d) The following piece of CSS code is used to style the 4 boxes shown below. What attribute is missing?

```
div{
    height: 50px;
    width:100px;
    border: 2px solid black;
    border-radius: 5px;
}
```



(4 marks)