

**OLLSCOIL NA hÉIREANN**  
**THE NATIONAL UNIVERSITY OF IRELAND, GALWAY**

SEMESTER 2 EXAMINATIONS 2000-2001

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**THIRD B.A. IN INFORMATION TECHNOLOGY**

***CT411 MULTIMEDIA DEVELOPMENT***

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Professor D. Bell  
Professor G. Lyons  
Mr. A. Reilly

Time allowed: TWO hours  
Answer 4 questions. All questions carry equal marks

- Q1 (a) Discuss how the use of multimedia can enhance traditional business software applications. (7)
- (b) (i) Outline briefly the computer hardware needed to capture and convert analogue audio into digital signals. (4)
- (ii) Describe the process of capturing digitised audio for use in a multimedia application, outlining the choices available to the sound engineer. (8)
- (iii) Explain the differences between digitised and synthesised audio. (6)
- Q2 Describe, with the aid of a diagram, the types of skilled personnel required to develop a multimedia application, writing short notes on the various members of the development team. (25)
- Q3 (a) Discuss what is involved in the planning of a multimedia project. (12)
- (b) Describe, with the aid of a diagram, the phases of a multimedia development project. (13)

Q4 Write notes on 3 of the following: (25)

- (a) Multimedia authoring tools
- (b) Legal issues in multimedia production
- (c) Jakob Nielsen's usability heuristics
- (d) dynamic HTML technologies
- (e) Distribution of multimedia applications

Q5 (a) (i) Describe the structure of a basic HTML page. (4)  
(ii) Compose an example personal home page to illustrate how to incorporate both basic document formatting and multimedia effects into a page. (11)

**Note:** Table of HTML tags provided below.

- (b) Describe the guidelines a web designer should follow when developing a new web site. (10)

Type	Tag	Attributes
Formatting	<FONT>	SIZE, FACE, COLOR
	<DIV>	ALIGN
	<B>, <I>, <U>,  , <HR>, <H1>-<H6>, <P>	
Hyperlink	<A>	HREF
Image	<IMG>	WIDTH, HEIGHT, ALT, SRC, BORDER, ALIGN, USEMAP
Image map	<MAP>	NAME
	<AREA>	SHAPE, COORDS
Table	<TABLE>	BORDER, BGCOLOR, ALIGN, WIDTH
	<TR>	ALIGN, VALIGN
	<TD>	ALIGN, VALIGN, COLSPAN, ROWSPAN
Miscellaneous	<APPLET>	WIDTH, HEIGHT, CODE, CODEBASE, NAME, ALT ALIGN
	<PARAM>	NAME, VALUE
	<EMBED>, <BGSOUND>	SRC, LOOP