

**OLLSCOIL NA hÉIREANN**  
The National University of Ireland

THE NATIONAL UNIVERSITY OF IRELAND, GALWAY

*SEMESTER II EXAMINATIONS 2003*

**3<sup>rd</sup> and 4<sup>th</sup> BA (IT) - CT411 (1EM1, 1OA1, 3BA1, 4BA4)**  
**Higher Diploma in Software Design & Development CT863 (1SD1)**

**INTERACTIVE MEDIA TECHNOLOGIES**

Professor D. Bell  
Professor G. Lyons  
Dr. A. Brennan

Candidates are required to answer **Four** questions.

All questions carry equal marks.

Time allowed: **TWO hours**

- Q. 1
- What is meant by and what is the importance of a stakeholder analysis in MM design (include UCD in discussion) ? (11)
  - Discuss typeface and point size considerations for the following media; Print, Video, Web (8)
  - Explain the difference among the following; Dialog, Voice over, Lip synchronization, Automatic dialog replacement. (6)
- Q. 2
- Explain how hearing works. Use a diagram. (10)
  - What is a preloader and how would you write a preloader scene for a MM presentation using either SWISH or FLASH. (9)
  - Explain 3 of the following terms; 'in the public domain', 'royalties versus buyouts', Noise gate, Digital master and Dynamic range (6)
- Q. 3
- Explain the following definition; "A set of co-ordinated channels spanning one or more modalities which have come, by convention to be referred to as a unitary whole and which possesses a cross-channel language of interpretation" (10)
  - What 4 techniques can you use to improve your memory? (8)
  - Compare and contrast spatial and temporal compression (use diagrams)? (7)

- Q. 4
- Discuss 3 point lighting. Use a diagram to show how it works (10)
  - Describe five of the following (10)  
Field rendering, Echoic memory, Static matte, Interlacing, Progressive scanning, EDL, Perception of movement.
  - How many bits per second are transferred if you use high quality audio (CD standard), with 4 channels of 16 bit samples. (5)
- Q. 5
- Describe in detail the basic parts of a good camera kit (talk about CCD, lens etc). (11)
  - What are the steps involved in the Digital Video and Firewire editing workflow? (9)
  - Describe 5 of the following terms from Scriptmaker; Scene, Chunk, Direction, Slugline, Shooting script mode, Master scene script, Parenthetical. (5)
- Q. 6
- Compare the digitization of video in a computer to the digitization of video in a camera (outlining advantages and disadvantages). (11)
  - What is a standard. Describe the difference between defacto and dejure standards (use examples)? (8)
  - What is 3-2 pulldown and why do it? (6)
- Q. 7
- Discuss the history and importance of copyright (12)
  - What are the 5 main approaches to solving the video storage problem? (7)
  - Describe three of the following (6)  
Performing rights license, Mechanical license, Patent, Timeline mode (in ULEAD), Effects option (in ULEAD).