

**OLLSCOIL NA hÉIREANN, GAILLIMH****National University of Ireland, Galway****Semester One Examinations, 1999/2000****Higher Diploma in Systems Analysis  
(Business Systems Development)****MULTIMEDIA AND NEW TECHNOLOGIES (MS 875)****Professor R. O'Callaghan****Professor J. F. Collins****Mr. C. J. Barry****Mr. M. A. Lang****Time allowed: TWO hours****Candidates are required to answer FOUR questions****All questions carry EQUAL marks.**

1. The suitability of a multimedia authoring toolkit for a particular project is determined by the requirements of the application or system under construction, in terms of interactivity, functionality, and time and cost effectiveness.

Describe the principle types and characteristics of multimedia authoring tools, and discuss the previous statement.

**(25 marks)**

2. "Hypermedia is radically different from conventional software as regards data representation capabilities and interactivity. As a technology, it raises tremendous opportunities to augment human communication, but poses significant challenges in terms of its management and development."

Discuss this statement.

**(25 marks)**

3. "The development of multimedia software involves the collaborative work of many individuals with diverse specialised skills, which in turn impacts project management and process management approaches."

Discuss this statement.

**(25 marks)**

4. A business syndicate comprising a local radio station, three hotels, a holiday cottage centre, a car rental firm, and an events management agency have hired you as a consultant multimedia developer. They have formulated a preliminary business plan, which involves the promotion of regional tourism using multimedia and Web-based technologies. The proposed system will include accommodation information (with full description of facilities, rooms, and amenities); interactive area and street maps showing shops, restaurants, and places of interest; descriptions of day-trip excursions by road; advertisements for local businesses; radio broadcasts; events guide and ticket information; and video clips of cultural activities and local heritage sites.

You are to outline suggestions as to how multimedia technologies may be applied to their needs. This outline should include a description of options, delivery methods, and constraints and limitations.

**(25 marks)**

5. (a) "The Internet has significant implications for business organisations at several different levels: from customer-to-business, business-to-business, as well as intra-organisational. For those businesses who have failed to make strategic or structural changes, the opportunities have passed and what remains is a competitive threat".

Discuss this statement.

**(20 marks)**

- (b) Briefly discuss the key Internet security issues that face the corporate sector.

**(5 marks)**

6. (a) "The approach towards multimedia development seems to be informed by the relative backgrounds of the developers involved, whether or not those backgrounds are useful or not".

Discuss this statement.

**(18 marks)**

- (b) It is only in recent years that newer methods have been developed that assist the construction of a multimedia piece ? What are they, and how have they been of assistance ?

**(7 marks)**