

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

Semester II Examinations, 2004/2005

Exam Code(s)	1MF1, 1IT1
Exam(s)	MSc (SOFTWARE DESIGN AND DEVELOPMENT) MASTERS IN INFORMATION TECHNOLOGY
Module Code(s)	CT532
Module(s)	INTERNET PROGRAMMING
Paper No.	1
Repeat Paper	Special Paper
External Examiner(s)	Prof. D. Bell
Internal Examiner(s)	Prof. G. Lyons Mr. A. Reilly

Instructions:

Answer 4 questions. All questions carry equal marks

Duration	2 hrs
No. of Answer books	1

Requirements:

Handout	_____
MCQ	_____
Statistical Tables	_____
Graph Paper	_____
Log Graph Paper	_____
Other Material	_____

No. of Pages	3
Department(s)	Information Technology

- Q1. (a) Distinguish between
 (i) The Internet and an intranet
 (ii) Thin and fat client
 (iii) Dynamic and static web pages (12)
- (b)(i) Explain how caching can improve the web browsing experience. (6)
 (ii) Describe the 3 tier architecture for web applications. (7)
- Q2. (a) (i) Outline, using suitable examples, how HTML works. (9)
 (ii) List 4 of the differences between HTML and XHTML. (4)
- (b) (i) Outline 2 design strategies for web site design. (4)
 (ii) Compare and contrast the use of tables and frames to provide a structure for your web pages. Use simple HTML examples to illustrate your answer. (8)
- Q3. (a) (i) Show how client-side scripts can be added to a basic HTML file. (4)
 (ii) Using diagrams, show how user form data may be processed in the web client-server model. (9)
- (b) Describe the JavaScript object hierarchy and show how it can be used to access form fields on a web page. (12)
- Q4. Describe briefly, using diagrams/examples where appropriate, any 3 of the following: (25)
- (a) Common Web Protocols
 (b) Absolute and Relative URLs
 (c) Input Validation Using VBScript
 (d) Maintaining State in ASP
 (e) Active X Technology
 (f) CGI Programming
- Q5. (a) (i) Distinguish between client-side and server-side web processing. (4)
 (ii) Outline the differences between client-side and server-side VBScript. (6)
- (b) (i) Describe how Active Server Pages work, paying particular attention to the ASP object model. (9)
 (ii) Using an example, explain the role of the Global.asa file in ASP. (6)

- Q6. (a) (i) List 5 design goals of XML. (5)
- (ii) Write a note on the role of Document Type Definitions (DTDs) and schemas in XML, outlining the differences between them. (8)
- (b) Describe the Microsoft .NET platform, outlining its advantages over "classic" ASP. (12)