

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

Semester II Examinations, 2004/2005

Exam Code(s)	<u>1SD1</u>
Exam(s)	<u>HDip (SOFTWARE DESIGN AND DEVELOPMENT)</u>
Module Code(s)	<u>CT870</u>
Module(s)	<u>INTERNET PROGRAMMING</u>
Paper No.	<u>1</u>
Repeat Paper	<u>Special Paper</u>
External Examiner(s)	<u>Prof. D. Bell</u>
Internal Examiner(s)	<u>Prof. G. Lyons</u>
	<u>Mr. A. Reilly</u>

Instructions: Answer 4 questions. All questions carry equal marks

Duration	<u>2 hrs</u>
No. of Answer books	<u>1</u>

Requirements:

Handout	<u></u>
MCQ	<u></u>
Statistical Tables	<u></u>
Graph Paper	<u></u>
Log Graph Paper	<u></u>
Other Material	<u></u>

No. of Pages	<u>3</u>
Department(s)	<u>Information Technology</u>

- 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)