

Comhairle na nDámhachtainí Breisoideachais agus Oiliúna
Further Education and Training Awards Council

Computer Architecture & Systems C20012

Theory Examination 2009
This written exam counts as 40% of the total module

Duration: Two Hours

INSTRUCTIONS TO CANDIDATES:

1. Answer any **ten** questions from Section A
2. Answer any **two** questions from Section B
3. All questions in each section carry equal marks
4. Return this exam paper when finished along with your answer book

Candidate Name: _____ **Date:** _____

PPS Number: _____

Section A (20%)

Answer any ten questions. All questions carry equal marks (2 marks each). If you answer more than ten questions the best ten marks will be chosen.

1. Name one common type of optical re-writable storage
2. What is the decimal value of the binary number **01111110**?
3. Name two common types of broadband Internet connection available. Are there comparative advantages or disadvantages with either?
4. What do the letters **WDS** stand for and what is a WDS?
5. List two benefits of email over traditional mail.
6. Printers use CMYK and monitors use RGB. What do these letters stand for and what are they used to describe and define?
7. What is the difference between web pages/sites prefixed by **http** and those prefixed by **https**?
8. What is the purpose of client/server computing? Outline one advantage of the Act and briefly discuss one of those provisions.
9. What is the function of the Linux command **rm**?
10. When printing, what is the meaning of **manual duplexing**?
11. Which has greater storage capacity, a DVD+R disk or a 16GB USB memory stick?
12. Using the Internet it is possible to access remote web-servers to create/modify web-pages and sites. Name two common tools used in this process.

Section B (20%)

*Answer any **two** questions. All questions carry equal marks (10 marks each). If you answer more than two questions the best two marks will be chosen. Each question should elicit an answer of approximately 1 A4 page.*

1. Much is made of the need in the current economic climate to maximise the lifetime of PCs already in use, with a view to reducing unnecessary capital expenditure. Outline some of the steps that can be used to lengthen the practical usage life of a computer under the headings of:

- 1.1. Software
- 1.2. Hardware
- 1.3. Connectivity
- 1.4. Other...

10 marks

2. List the main components required to create a computer network. Your description should allow for:

- 2.1. Internet access
- 2.2. Wireless access
- 2.3. Shared printing
- 2.4. Provide a detailed diagram to clarify your design...

10 marks

3. Linux now exists in a number of attractive and highly functional distributions with sufficient variety of applications to be considered a fully viable replacement for Microsoft Windows™ on the desktop. Describe and discuss the steps by which you might migrate a Windows™ system *and its users* to Linux for ordinary daily office use...

10 marks