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

(National Council for Vocational Awards)

Computer Architecture & Systems C20012

May 2010

Duration: Two Hours

INSTRUCTIONS TO CANDIDATES:

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

This written exam counts as 40% of the total module

NAME (PRINT):_____
PPS NUMBER:_____
DATE:_____

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. What is the function of a network interface card (**NIC**)?
2. How many megabytes are in a gigabyte?
3. Name two advantages of a broadband Internet connection.
4. Convert the binary value **1101 0010** into decimal
5. List two benefits of e-mail over traditional mail.
6. What do the letters **CMYK** stand for? In what context are they used?
7. List four common I/O devices. Write a note on two.
8. What do the letters **ASCII** stand for? Why and where is **ASCII** used?
9. When a Linux X-Windowing system locks what keyboard combination can you use restart it without needing to restart the computer?
10. What is the function of the LINUX command **rm**? What is the command to change directory?
11. What danger do email attachments represent? What steps can be take to minimize this danger?
12. What is the purpose of the Data Protection Act? Outline two provisions of the Act.

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.*

1. (a) List the main components required to create a computer network. Write a description of the most important ones, explaining the function of each.

6 marks.

(b) What are FTP, SSH, HTTPS and TELNET? Write a note on each.

4 marks.

2. (a) List the main components you would expect to find in a modern PC, including peripherals. Write a note on each explaining its function, and if necessary, an example of its use. Not less than 6 items should be listed.

6 marks

(b) Is the processor speed of the CPU alone a good indicator of computer system performance? Discuss in detail.

4 marks

3. (a) Fedora Linux is an operating system developed under the Open Source model. Microsoft Windows is a proprietary operating system developed by a private company. From your experiences compare the two operating systems under these headings:

- Cost
- Reliability
- Security

5 marks

(b) OpenOffice.org is also a product of the Open Source community. How does it compare with Microsoft Office? Compare it under the headings:

- Cost
- Compatibility
- Ease of Use
- Functionality

5 marks