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

(National Council for Vocational Awards)

Computer Architecture & Systems C20012

Theory Examination 2004

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 kilobytes are in a gigabyte?
3. Name two advantages of a broadband Internet connection.
4. What is the purpose of the registry in the Windows range of operating systems?
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 brief note on one.
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?
10. If all the USB ports in a computer are in use and further USB devices are to be added what type of device can be used to remedy the problem?
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.

5 marks.

(b) List the main components required to link a computer to The Internet.

5 marks.

2. (a) Write a note on communications resources in a PC. What difficulties can arise with the addition of new hardware to a PC?

2 marks

(b) When buying a new computer one must make choices about CPU speed, RAM amount and hard-drive capacity. Is it always best to buy the fastest CPU or is there a case to be made for spending the money this would cost on extra RAM or extra hard drive capacity? Discuss.

8 marks

3. Redhat 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 any *five* of the following headings:

Cost
Reliability
Range of available applications
Ease of use/user friendliness
Hardware compatibility
Security

10 marks