(National Council for Vocational Awards)

Computer Architecture & Systems C20012

Theory Examination 2003

Duration: Two Hours

NAME (PRINT): _____

EXAM 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. How many bytes are in a megabyte?

2. What do the letters CD-RW stand for? When are CD-RW used?

3. What is the difference between serial and parallel communications. Which is fastest?

4. What do the letters ISDN stand for? Name an advantage of using ISDN.

5. List two functions of an operating system.

6. What are interrupts?

7. What is the purpose of the Data Protection Act? Outline two provisions of the Act.

8. What is the purpose of cache memory? Is it cheaper or more expensive than normal memory?

9. What is the function of a network interface card (NIC)?

10. What is the function of the LINUX command **mv**? What is the command to delete a file?

11. What is the main privacy concern associated with email?

12. What is the purpose of the registry in the Windows range of operating systems?

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) You have been asked to provide a specification for a PC for use as a word processing machine in an office. Provide a brief specification covering hardware and software. Provide reasons for your suggestions.

8 marks.

(b) What are the main advantages of networked rather than standalone computers?

2 marks.

2. (a) There are two principal types of non-impact printers. What are they and how do they work? Discuss the advantages of each type.

8 marks

(b) Are IDE or SCSI hard drives normally preferred in servers? Give a reason for your answer.

2 marks

3. (a) The 802.11b protocol defines how wireless networks operate. Outline the main components in such a network and how they are arranged.

5 marks

(b) List the main components required to link a computer to The Internet. Briefly outline the installation steps.

5 marks