National Council for Vocational Awards

Information Technology CITXX

Computer Architecture and Systems

C20012

2001

Answer ten questions in Section A (25%)
Answer three questions from Section B (75%)

Time allowed: 2 hours

This written exam counts as 40% of the total module

Section A (25%)

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

1. What is the typical transmission speed of an ISDN line?

2. How many kilobytes are in a megabyte?

3. Apart from processor speed, name another way to compare two computer systems.

4. List two types of *re-writeable* removable storage media.

5. What is the function of the LINUX command **rm**?

6. List four input devices.

7. What is the function of RAM?

8. What do the letters OCR stand for?

9. Convert 1100 0011 to decimal.

10. What device translates analogue telephone signals to digital computer signals?

11. Name an advantage of hard disks over floppy disks.

12. List two benefits of e-mail over traditional mail.

Section B (75%)

Answer any three questions. All questions carry equal marks. If you answer more than three questions the best three marks will be chosen.

1 What distinguishes a GUI from a CLI? Outline an example of each, stating advantages and disadvantages.

2 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 8 items should be listed.

3 (a) Explain how magnetic disks work. Provide a diagram in support of your explanation.

(b) There are two main types of hard-disks used in PCs. What are they and what are the advantages and disadvantages of each? What type of computers would you typically find each one in?

4 Outline the steps to connect a home computer to the Internet. List any hardware and software that should be present as well as any services that should be provided.

5 Write a description of the main components required to create a computer network.