



***(National Council for Vocational Awards)***



# **Computer Architecture & Systems C20012**

**Theory Examination 2005**

## **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.*

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1. What do the letters CLI and GUI stand for? Write a brief note about one of them.
2. What is the purpose of the Data Protection Act? Outline two provisions of the Act.
3. What do the letters CMYK stand for? In what context are they used?
4. List four common I/O devices. Write a brief note on each one explaining its function.
5. What advantage does the ASCII system provide for computer systems operating on the network? What does ASCII stand for?
6. Suggest an advantage of web-based email (webmail) over other forms of email, such as POP3 etc.
7. Convert the binary value 0100 0101 to decimal.
8. What is the function of RAM? What advantage does having more RAM give a computer?
9. Why are floppy disks increasingly less used. Suggest an alternative rewritable storage medium.
10. Which Operating System is more susceptible to viruses, Windows or Linux?
11. How many bits are in a kilobyte?
12. What is a VGA, SVGA or similar type device used for?

## 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.

**7 marks.**

(b) What does a duplex printer do; how does it differ from a non-duplex printer? Where might one be useful?

**3 marks.**

2. (a) Write a note on **who** one buys a computer from, as distinct from the type of computer. When buying a laptop, what duration of warranty should one purchase?

**4 marks**

(b) Describe the primary mechanisms for connecting to broadband. What are the advantages of broadband over modems and dialup ISDN. Name one disadvantage.

**6 marks**

3. (a) 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 *three* of the following 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**