FETAC

Further Education and
Training Awards Council

Comhairle na nDámhachtainí
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Computer Architecture & Systems C20012

May 2011

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:_____

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Senior
College
Clonmel

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. To which type of port could you attach the widest range of devices: a parallel port, a PS/2 port or a USB port?

2. How many bytes are in a kilobyte?

3. What is a **CPU** and what does it do?

4. Convert the binary value **1000 1011** into decimal

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

6. What is the difference between manual and automatic duplexing?

7. What is the significance of the letter **S** in **S**SH and HTTP**S**?

8. What is the purpose of making file backups?

9. What is the name of the Linux superuser? What is the benefit of being the superuser as distinct from any other user?

10. What is the function of the LINUX command **cp**? What is the command to remove a file?

11. What are the main differences between a **CLI** and a **GUI**? What do those letters stand for?

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) Draw the 4 layer network/Internet model. Write an explanation of how each layer works.

4 marks

(b) Describe and discuss the steps you would follow to provide internet connectivity as well as a reliable wireless signal in a small office. Ensure you:
- List any hardware, software and services that are required.
- List other key issues that you feel would have to be considered.

6 marks

2. (a) Other than the keyboard, mouse and monitor, list 3 I/O devices you have used. Explain the purpose of each one – the facility it provides – and how it is used with the computer.

6 marks

(b) List 4 types of removable storage in current use. For each one discuss their common applications and their advantages and disadvantages.

4 marks

3. (a) 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

4 marks

(b) There are a large number of applications available from the Open Source community. List 3 of these; then discuss them under the headings of:
  • Compatibility
  • Ease of Use
  • Features and functions

6 marks