



COMPUTER ENGINEERING

Level 4 Diploma

UNIT 5 – PERSONAL COMPUTER SOFTWARE SUPPORT

Question 1

- (a) Define what is meant by the term 'concurrent processes' in the context of an operating system, briefly explaining their role. (4 marks)
- (b) List the key stages that are involved in installing and configuring an operating system, describing and stating the purpose of each stage. (6 marks)
- (c) Review the key differences between navigating a file system using a graphical user interface (GUI) and a command-line interface (CLI). (10 marks)

Question 2

- (a) In the context of operating systems, describe what is meant by the terms 'distribution' and 'release'. (4 marks)
- (b) Explain, with references to UNIX-like and other operating systems, how the command shell can be used to execute text mode applications. (6 marks)
- (c) Describe in detail how troubleshooting guides and error logs in an operating system can be used to determine the source of a system fault. (10 marks)

Question 3

- (a) Evaluate the suitability of Windows and Linux as an operating system for a child's first personal desktop computer. (10 marks)
- (b) Discuss the key installation requirements for a child's computer game, describing how system capabilities can be determined. (10 marks)

Question 4

- (a) Describe in detail how an operating system can be configured to address the installation of a new graphics card. (10 marks)
- (b) Review THREE utilities, including at least ONE third-party utility, that can be used to troubleshoot problems with the installation of new computer memory. (10 marks)

Question 5

- (a) Discuss the merits and potential pitfalls of using forums and other discussion groups to help resolve software problems. (10 marks)
- (b) Explain how the system restore utility can undo and potentially remedy a faulty software installation, commenting on its capabilities and limitations. (10 marks)

Question 6

- (a) Identify FOUR potential health and safety concerns in a professional IT support environment. (8 marks)
- (b) Evaluate the procedures that should be followed to address these concerns, referring to practicality and worker acceptance. (12 marks)

Question 7

- (a) Analyse the different ways in which computer systems have an impact on the environment. (12 marks)
- (b) Evaluate at least FOUR measures that professional IT support environments can take to minimise these impacts. (8 marks)