



**Professional  
Qualification in**

**COMPUTER ENGINEERING**

**Level 4 Diploma**

**UNIT 1 – COMPUTER SYSTEMS**

**Question 1**

**Illustrate** how high-performance supercomputers benefit industry. (20 marks)

**Question 2**

- (a) **State** what is meant by the term 'central processing unit'. (4 marks)
- (b) **Describe** the key peripheral computer components needed in a general office environment. (8 marks)
- (c) **Explain** how different software applications improve an organisation's productivity. (8 marks)

**Question 3**

- (a) **Discuss** the main aspects to be considered when designing a computer system to meet the needs of a client. (10 marks)
- (b) **Identify** TWO techniques of evaluating a computer design. (10 marks)

**Question 4**

- (a) **Describe** how to install a main external communication device to a computer system. (10 marks)
- (b) **Illustrate** how to configure the BIOS. (10 marks)

**Question 5**

- (a) **State** what is meant by the term 'application patch'. (4 marks)
- (b) **Describe** how preventative maintenance improves system reliability. (8 marks)
- (c) **Explain** how utility software improves system efficiency and reliability. (8 marks)