



## Professional Qualification in COMPUTER ENGINEERING Level 4 Diploma

### UNIT 2 – COMPUTER SECURITY

#### Question 1

- (a) **Explain** how to effectively analyse security risks posed by software vulnerabilities. (10 marks)
- (b) **Describe** the impact a buffer overflow attack may have on an organisation. (10 marks)

#### Question 2

- (a) Using examples, **describe** the harm a SQL injection attack can have on website software. (10 marks)
- (b) **Describe** the threats posed to an organisation by tracking cookies and keystroke loggers. (10 marks)

#### Question 3

- (a) **Compare** and **contrast** the impact that attacks by viruses and spyware have on computer security. (10 marks)
- (b) **Describe TWO** attack vectors and the reasons for their use. (10 marks)

#### Question 4

A client is concerned about the security of their computer system. **Discuss** what suggestions could be made to help protect their system against electronic attacks from the Internet. (20 marks)

#### Question 5

**Discuss FOUR** types of phishing attack and their possible impact on the operation of a commercial business. (20 marks)