



Professional Qualification in COMPUTER ENGINEERING Level 4 Diploma

UNIT 2 – COMPUTER SECURITY

Question 1

- (a) **Explain** how a bug in user software may allow others to gain unauthorised access to data. (10 marks)
- (b) **Describe** the possible impact on a user's privacy of Cross-Site Scripting (XSS) flaws. (10 marks)

Question 2

- (a) **Compare** and **contrast** the threats to a user's privacy of trojans and spyware and how to defend against them. (10 marks)
- (b) **Discuss** the motivations that programmers may have to produce and distribute malware. (10 marks)

Question 3

- (a) **Describe** the possible problems for a commercial business of performance degradation resulting from a successful cyber-attack. (10 marks)
- (b) **Discuss** the possible impact on a commercial e-commerce business of a successful cyber-attack on their online payment systems. (10 marks)

Question 4

- (a) **Describe TWO** different techniques which can be used to protect an IT system against attacks. (10 marks)
- (b) **Discuss** the function and role of intrusion detection systems in helping to prevent an attack on an IT system. (10 marks)

Question 5

Discuss the possible problems to individual users and e-commerce organisations posed by phishing, spam and other scam email content. (20 marks)