



Professional Qualification in COMPUTER ENGINEERING Level 4 Diploma

UNIT 2 – COMPUTER SECURITY

Question 1

- (a) **State** what is meant by the acronym 'DDoS'. (2 marks)
- (b) **Describe how** a DDoS attack is performed. (6 marks)
- (c) **Illustrate** the consequences of a successful DDoS attack. Use diagrams and/or examples to support your answer. (12 marks)

Question 2

- (a) **State** what an attack vector is. (2 marks)
- (b) **Describe how** a trojan can infect a computer system. (6 marks)
- (c) **Compare why** email and external memory devices are popular attack vectors. (12 marks)

Question 3

- (a) **Describe** a phishing email. (4 marks)
- (b) **Describe** a key logger. (4 marks)
- (c) **Compare how** phishing emails and key loggers collect data from unsuspecting users. (12 marks)

Question 4

- (a) **State** the meaning of the term 'password'. (2 marks)
- (b) **Explain why** it is important to have strong passwords. (6 marks)
- (c) **Illustrate THREE** properties of a strong password. Use diagrams and/or examples to support your answer. (12 marks)

Question 5

Illustrate how firewall protects a computer system against attacks. Use diagrams and/or examples to support your answer. (20 marks)

March 2016