**NAIROBI INSTITUTE OF BUSINESS STUDIES**

**DEPARTMENT OF COMPUTER SCIENCE**

**DIPLOMA IN COMPUTER ENGINEERING**

**(LEVEL 4)**

**END TERM EXAMINATION– MARCH 2014**

**TIME ALLOWED: 3 HOURS**

**COMPUTER SECURITY**

|  |
| --- |
| **INSTRUCTIONS:**   1. Answer **ALL the Seven questions.** 2. **Time allowed is 3 hours.** 3. Any examination **irregularity** will lead to **disqualification.** 4. Indicate your **Admission No**. in each answer sheet. 5. Cell phones should be switched off during the examination. 6. No reference material of any kind should be carried into the examination room. 7. Marks may be lost for illegibility. |

***© NIBS***

**Question 1**

Explain the common features of a Distributed Denial of Service (DDoS) attack, and contrast the different symptoms of the attack when launched from general bot-net versus peer-to-peer attacks.

(20 marks)

**Question 2**

Describe ONE common aim of an SQL injection attack and explain how this type of attack can be executed and the different modes by which the results are gathered. (20 marks)

**Question 3**

Explain what is meant by ‘Trojan’ malware, how it can be used for electronic money or data theft and describe typical methods for securing against their installation on computers. (20 marks)

**Question 4**

Discuss the symptoms and consequences of a computer being used as a node of a bot-net (20 marks)

**Question 5**

Explain how anti-virus software operates and describe TWO drawbacks or limitations to their use. (20 marks)

**Question 6**

Explain what is meant by ‘phishing’, describing its typical objectives and the common methods by which the attack is executed. (20 marks)

**Question 7**

Discuss the merits and drawbacks of setting password expirations and using random character strings to enhance password security, and describe THREE other password policies that can be used to increase security. (20 marks)