

ELIZADE UNIVERSITY, ILARA MOKIN FACULTY OF BASIC AND APPLIED SCIENCE DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

FIRST SEMESTER EXAMINATION 2020/2021 SESSION

HOD's SIGNATURE

COURSE TITLE: FUNDAMENTALS OF CYBERSECURITY I

COURSE CODE: CYB 201

INSTRUCTIONS: Answer Any Four Questions

Time Allowed: 2 Hours

- 1. (a) What is cybersecurity?
 - (b) Explain briefly why the internet is a safe place that harbors cybercriminals
 - (c) State and explain the five main components that make up cybersecurity
- 2. (a) Differentiate between cybersecurity and information security
 - (b) Write briefly on the following
 - (i) Cyber Attack
 - (ii) A Threat
 - (iii) An Exploit
 - (c) With the aid of a diagram, explain the classification of threats
- 3. (a) There are various steps involved in an attacking scenario, list and briefly explain the steps
 - (b) (i) What is security testing?
 - (ii) Explain what is the purpose penetration testing
 - (c) How do malicious payloads harm their victims?
- 4. (a) What is a security vulnerability?
 - (b) (i) Differentiate between attack vectors and attack surface
 - (ii) What are 5 common examples of attack vector?
 - (c) State and explain the two types or categories of attack vectors
- 5. (a) Explain the following attacks in detail
 - (i) advanced persistent threat (APT) attack
 - (ii) Cross-site Scripting (XSS) attack
 - (iii) SQL injection attack
 - (b) (i) What is social engineering?
 - (ii) Explain how phishing attack can be prevented
- 6. (a) The CIA Triad is considered the core underpinning of information security. Explain the objectives of information security with respect to the CIA Triad.
 - (b) What are the standard measures to establish
 - (i) Confidentiality
- (ii) Integrity (iii) Availabiltiy
- (c) State and explain any 3 types of access control.