**CSC3207 COMPUTER SECURITY**
**MODULE 4 SOFTWARE SECURITY ASSIGNMENT**
**MARCH 2024**

**SUBTOPIC: MALICIOUS LOGIC**

**INSTRUCTIONS**
1. This is a Group Assignment to be presented in class on 15th March 2024.
2. Presentation slides to be submitted via MUELE as well on 14th March 2024 23:00 hours.
3. Attempt all questions.

**REFERENCES**
1. Chapter 19; Introduction to Computer Security by Matt Bishop;
2. Chapter 23; Computer Security: Art and Science by Matt Bishop; 2nd Edition

**QUESTIONS**
1. Define the term "malicious logic/malware"
2. Describe types of malicious logic: trojan horse, computer viruses, computer worms, rootkits, bots and botnets
3. Explain the different types of computer viruses: multipartite virus, macro virus, polymorphic virus, encrypted virus, Stealth Viruses, terminate and stay resident (TSR) virus, metamorphic virus
4. Describe infection vectors of computer viruses ie through a boot sector, executables, or data
5. Describe other forms of malicious logic: adware, spyware, ransomware, phishing, logic bombs, rabbits and bacteria
6. Explain the how computer worms and computer viruses propagate.
7. Explain the concealment of computer viruses
8. Describe the payload/actions of the malware
9. Explain defenses against malicious logic