

## UNIVERSITY EXAMINATIONS: 2023/2024 EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN APPLIED COMPUTING

## **BISF 3103 CYBER SECURITY CAT#2**

DATE: SAT 4<sup>TH</sup> TIME: 4HRS

**INSTRUCTIONS: All Questions are Compulsory,** 

## **QUESTION ONE (10Marks)**

Artificial intelligence is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. AI is important for its potential to change how we live, work, and play. It has been effectively used in business to automate tasks done by humans, including customer service work, lead generation, fraud detection, and quality control. In a number of areas, AI can perform tasks much better than humans. Identify at least six (6) ways that organizations can make use of artificial intelligence to enhance cybersecurity

## **QUESTION TWO (20Marks)**

Security researchers have identified numerous emerging threat trends and new tactics across phishing and social engineering, data theft and extortion, ransomware, and software supply chain attacks. The advanced persistent threat (apt) is a new level of threat sophistication that bypasses virtually all leading cybersecurity practices. Describe the advanced persistent threat (apt) challenge that a cyber security practitioner might face in her daily activities and how to mitigate the same.