## National Open University of Nigeria Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja Faculty of Sciences Department of Computer Science 2023\_1 POP EXAMINATION:

**COURSE CODE: CIT855** 

**COURSE TITLE: Advanced Cyber-Security** 

**CREDIT: 2 Units** 

**TIME ALLOWED: 2 Hours** 

INSTRUCTION: Answer Question ONE (1) and any other TWO (2) Questions

1a. Explain the term Physical Security (3 marks)

1bi. Explain the principle of Least Privilege in cyber-security (4 marks)

1bii. Explain the principle of Work Factor (4 marks)

1biii. What is the main crux of ISO 27032 standard (4 marks)

1biv. What is Hacktivism (6 marks)

1c. Describe how Screened Subnet Firewalls works (6 marks)

1d. Data archives may have many various forms. Name them (3 marks)

- 2a. Explain any eight gains of implementing and maintaining cybersecurity (8 marks)
- 2b. What are Application gateways

(6 marks)

- 2c. Discuss any three characterization of packet filtering firewalls (6 marks)
- 3a. In a sequential order, explain the basic steps that must be complied with in a risk analysis process (12 marks)
- 3b. Discuss any four (4) major threats related to e-cash system (8 marks)
- 4a. List and explain any six (6) types of malwares created by hackers (12 marks)
- 4b. List and explain any four (4) steps to followed in creating a digital signature (8 marks)
- 5a. What do you understand by man-in-the-middle attack
- 5b. Explain any five (5) system-based attacks

(10 marks)

(2 marks)

5c. Justify the rationale for establishment of security policies in organizations (8marks)