

Faculty of Computing and Informatics

School of Computing

Department of Software Engineering

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DEPARTMENT OF SOFTWARE ENGINEERING

| QUALIFICATION: BACHELOR OF COMPUTER SCIENCE (HONS SOFTWARE DEVELOPMENT) | | |
|---|----------------------|--|
| QUALIFICATION CODE: 08BCHS | LEVEL: 8 | |
| COURSE: SECURE SYSTEMS | COURSE CODE: SSS811S | |
| DATE: JULY 2023 | SESSION: THEORY | |
| DURATION: 3 HOURS | MARKS: 100 | |

| SECOND OPPORTUNITY / SUPPLEMENTARY EXAMINATION QUESTION PAPER | |
|---|-------------------|
| EXAMINER (S) | MR ARPIT JAIN |
| MODERATOR: | MR NDANGI NASHIKU |

THE QUESTION PAPER CONSISTS OF 2 PAGES

(Including this front page)

INSTRUCTIONS

- 1. Answer ALL the questions.
- 2. Write clearly and neatly.
- 3. In answering questions, be guided by the allocated marks.
- 4. Number your answers clearly following the numbering used in this question paper.

PERMISSIBLE MATERIALS

1. None

| Question 1 | [20] |
|--|--------------|
| What are the defence techniques you can implement with different stages of a Cyber Kill Chain? | } |
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| Question 2 | [20] |
| What is Threat modelling and Vulnerability discovery? | [10] |
| How can you architect your infrastructure and processes to be responsive to the inevitable chan you'll face? | nges [10] |
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| Question 3 | [20] |
| How to classify access based on risk and examine best practices that enforce least privilege. | [10] |
| What are the Policy Framework for Authentication and Authorization Decisions | [10] |
| | |
| Question 4 | [20] |
| (a) How do you change your design while changing the landscape? | [10] |
| (b) What is the complication arriving when plan changes? | [10] |
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| Question 5 | [20] |
| (a) What are the techniques to deploy the response mechanism? | [10] |
| (b) What are the design principles for the system to be resilient under adverse or unexpected | [10] |

