



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY
FACULTY OF COMPUTING AND INFORMATICS**

DEPARTMENT OF COMPUTER SCIENCE

QUALIFICATION: BACHELOR OF COMPUTER SCIENCE (HONS DIGITAL FORENSICS)	
QUALIFICATION CODE: 08 BHDF	LEVEL: 8
COURSE: MOBILE FORENSICS	COURSE CODE: MBF821S
DATE: JANUARY 2020	SESSION: THEORY
DURATION: 2 HOURS	MARKS: 70

SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER	
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THIS QUESTION PAPER CONSISTS OF 1 PAGE
(Excluding this front page)

INSTRUCTIONS

1. Answer ALL the questions.
2. Write clearly and neatly.
3. Begin each question on a new page.
4. Number the answers clearly as per the question paper numbering.
5. Marks/Scores per question paper are given in [].
6. NUST examination rules and regulations apply.

PERMISSIBLE MATERIALS

1. None

Question 1

- (a) During the mobile device forensic process, the data capture involves different avenues. Identify and explain any three such data capture avenues **[6 marks]**.
- (b) Consider using logical tools. Identify six (6) items that can be pulled from mobile devices on a best-case scenario basis **[6 marks]**.
- (c) Those involved in system administration should know about Mobile Forensics. Why? **[4 marks]**.
- (d) Which two key areas will you attribute to mobile device forensics investigations beyond the device itself? **[4 marks]**.

Question 2

- (a) Base stations are key components in Mobile Forensics. Explain why that is the case, giving some examples where necessary **[6 marks]**.
- (b) The general rules of evidence apply across board when considering Digital and Mobile Forensics. Identify any three such rules and explain each of them in brief **[6 marks]**.
- (c) There are several on-scene activities to be performed, identify a hypothetical case and explain in detail any 4 on-scene activities you would perform for such a case **[8 marks]**.

Question 3

- (a) Mobile Forensics is filled with challenges, which are yet to be addressed for full solution provision. Identify and explain any four such challenges **[8 marks]**.
- (b) Briefly explain what physical data acquisition and logical data acquisition methods entail **[8 marks]**.
- (c) Cellphones and mobile devices have often been used in committing crime. What are the two main concerns in the search and seizure procedures for cellphones and mobile devices? **[4 marks]**.

Question 4

- (a) Match the following factors to their considerations **[5 Marks]**.

Table 1: Factors to their considerations

Factor	Consideration
I. Integrity of the collection process	A. How long will on-site examinations last?
II. Equipment resources	B. Will the investigation cause financial hardships?
III. Impact on target organisation	C. How volatile is the evidence?
IV. Personnel considerations	D. Is the equipment impractical?
V. Estimation of time	E. Is this to be done on-site or in the lab?

- (b) Apart from SQLite and Plist files, several other locations on IOS devices may contain valuable information to an investigation. List any five (5) such sources **[5 marks]**.

*******End of Examination Paper*******