



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE**

**COMPUTER SECURITY AND FORENSICS**

**SEMESTER 2015/2016 ACADEMIC YEAR**

**SPECIAL RESIST**

**MAIN CAMPUS**

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**COURSE CODE: IIT 3224**

**COURSE TITLE: CRIMINALISTIC FORENSIC LAB**

**EXAM VENUE: LAB 1**

**STREAM: BSc. Actuarial**

**DATE: 05/05/16**

**EXAM SESSION: 2.00 – 4.00 pm**

**TIME: 2.00 HOURS**

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**INSTRUCTIONS:**

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

## QUESTION ONE

- a) Define and distinguish forensic science and criminalistics (4 marks)
- b) Several **theories** attempt to explain criminal behavior. Outline and explain three of them (6 marks)
- c) List three common types of digital crime (6 marks)
- d) Crime is part of human nature. Crime is based on biological, psychological, sociological, and/or economic aspects. Expound on this statement (4 marks)
- e) There are various forms of Crime Scene Mapping. Identify and explain three (10 marks)

## QUESTION TWO

- a) Describe how to prepare for computer investigations and explain the difference between law enforcement agency and corporate investigations (8 marks)
- b) What is the first critical step in crime-scene investigation? Why is this step so important? (6 marks)
- c) List the three methods of crime-scene recording. (6 marks)

## QUESTION THREE

- a) According to criminal investigators, fingerprints follow 3 fundamental principles: List and explain (6 marks)
- b) Explain Locard's exchange principle? (6 marks)
- c) Why do most sociological theories of crime causation assume that a criminal's behavior is determined by his or her social environment and reject the notion of the born criminal. (6 marks)
- d) List the main functions of the forensic scientist. (2 marks)

## QUESTION FOUR

- a) What are the possible consequences of failing to maintain a proper chain of custody? (4 marks)
- b) What is a standard/reference sample and why is it important to the criminalist?(2 marks)
- c) List two types of computer investigations typically conducted in the corporate environment. (6 marks)
- d) Discuss the key assumptions of the positivist school of thought in the neoclassical theory (8 marks)

## QUESTION FIVE

- a) What information must be included in any notes taken at the crime scene? (4 marks)
- b) What is the best way to maintain the integrity of evidence that is collected and submitted to the crime laboratory? (4 marks)
- c) How can the extreme sensitivity of modern analytical techniques hinder the process of comparing items of physical evidence? (6 marks)
- d) How does the testimony of an expert witness differ from the testimony of a lay witness? (6 marks)