JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN COMPUTER SECURITY AND FORENSICS

1ST YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE	:	**IIT3423**		
COURSE TITLE	:	**CYBER SECURITY AND THE LAW**		
EXAM VENUE	:		**STREAM:**	
DATE	:	**APR 2016**	**EXAM SESSION**	:
TIME	:	**2.00 HOURS**		

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 [30mks]

a. The term "cybercrime" is used to cover a wide variety of criminal conduct. It is difficult to develop a typology or classification system for cybercrime. One approach can be found in the Convention on Cybercrime, which distinguishes different types of offences. State these offences [4mks]

b. As computers became more and more central, the concern was to protect against unauthorized access to computer data per se. increasing connectivity magnified these concerns; It gave rise to new problems. Explain these problems [4mks]

c. In the Green Paper on Copyright and the Challenge of Technology of 1988, the Commission of the European Communities expressed a strong need to harmonize legislation of Member States regarding software protection. Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs. Explain the Berne Convention for the Protection of Literary and Artistic Works [4mks]

d. Explain the features of digital technology which facilitate crime and hamper law enforcement [6mks]

e. The Kenya Information and Communications Act provides for avenues through which legitimate expression is criminalized. Under its section 29, describe how bloggers exploit cyber space to commit an offence [6mks]

f. What does Section 30 and 31 of the Kenya Information and Communication Act 2009 addresses in regard to cyber space security? [6mks]

Question Two [20mks]

a. Unauthorised access of a computer program is violation of Article. 4 of Italian Copyright Act that give the exclusive rights of the rightholder. This shall include the right to do or to authorize access. What are these rights? [6mks]

b. Digital cameras utilizing the Exchangeable Image file Format (ExIF) produce JPEG or TIFF files. This provides legal evidence that can be used in court. What metadata is revealed by digital cameras except Camera settings when picture taken [5mks]

c. Many computers in Kenya are regularly compromised and taken over by hackers to mount distributed denial of service (DDoS) attacks. Most of these incidents are launched by foreign hackers. State and explain the forms of authentication [9mks]

Question Three [20mks]

a. Modern Era Communications Decency Act allows Internet Service Providers to monitor user activity. The ISP does not take responsibility for user traffic in place then no ISP liability. Explain the exceptions [3mks]

b. Electronic Communications Privacy Act (1986) says all business communication belongs to that business. Explain the use business E-mail at home in terms of privacy [8mks]

c. The cyber space has no boundaries. You can break a law in Kenya by using indecent speech and offensive speech, but you were on the Internet in Egypt. Based on jurisdiction, explain the Miller Test for Obscenity on cyber space [9mks]

Question Four [20mks]

a. Explain the potential evidence of crime using components of computer system [10mks]

b. Biometric scanners are access control device. Explain the source of digital evidence on intrusion detection system on biometric scanners [10mks]

Question Five [20mks]

a. State and explain the categories of cybercrime [9mks]

b. Explain how Real-world cybercrime has shaped law enforcement [11mks]