

OFFICE OF THE DEPUTY VICE CHANCELOR-ACADEMICS AND STUDENTS AFFAIRS

# UNIVERSITY EXAMINATIONS 2016/2017 ACADEMIC YEAR

# THIRD YEAR SECOND SEMESTER EXAMINATION FOR DEGREE

IN

# BACHELOR OF SCIENCE IN COMPUTER SCIENCE

**COURSE CODE: COM 421** 

COURSE TITLE: ENGINEERING AND SOFTWARE LAW

DATE: 20/06/2017 TIME: 9:00AM-12:00PM

# INSTRUCTIONS TO CANDIDATES

- Answer all question ONE and any other TWO questions
- Do not write on the question paper
- Marks are shown at the end of each question
- Show workings in the answer booklet for award of full marks
- Mobile phones are not allowed in the examination venue
- Each question should begin on a fresh page
- Duration is 3 hours

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#### THIRD YEAR SECOND SEMESTER

#### FOR BARCHELOR OF SCIENCE COMPUTER SCIENCE

### **COM 421: ENGINEERING AND SOFTWARE LAW**

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#### **SECTION A**

# **Question One**

- a. Explain how software licensing helps software engineers (5mks)
- b. Giving one specific example, explain how a patent can be used to fuel progress in Kenya (5mks)
- c. With specific examples, distinguish Open, Free and Propriety software (5mks)
- d. Discuss any 5 criteria related to the distribution terms of a license for it to qualify as "open source". (5mks)
- e. Within a software Product Development (including the Testing Group), a manual might serve several functions. Discuss the functions of a manual. (5mks)
- f. Explain the key functions of computer ethics (5mks)

#### **SECTION B**

# **Question Two**

- a. Describe the functions of and relationships among laws, regulations, and professional organizations in information security. (15mks)
- b. Distinguish Open, Free and Propriety software (5mks)

#### **Question Three**

- a. What is personal privacy and why is it valuable? (5mks)
- b. Discuss the characteristics of a profession and state wether computing is a profession or not. Justify your answer (10mks)
- c. Explain the functions of the Kenya Industrial Property Institute (KIPI) (5mks)

# **Question Four**

- a. Discuss any four general moral imperatives that a computer professional should observe. (10mks)
- b. Explain how patents and copyrights are applied as two forms of protection (10mks)

# **Question Five**

a. Carl works for general purpose software and Hardware Company on a project for the military. The project involves developing a system that monitors radar signals for missiles and launches nuclear missiles when deemed necessary. Carl was initially reluctantly but eventually agrees. His thinking was that if he does not do it, someone else will anyway. During his work he develops some reservations concerning the fine distinction between missiles and small planes. He expresses this to his manager who promptly dismisses the claim on the basis that he does not agree with the claim and that project was already late. Carl feels morally responsible.

What should he do? Discuss. (15mks)

b. How does one obtain patent protection in Kenya? Explain. (5mks)