

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS DEPARTMENT OF INFORMATION SYSTEMS & TECHNOLOGY UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN INFORMATION AND COMMUNICATION TECHNOLOGY

### **MAIN CAMPUS**

4<sup>TH</sup> YEAR 1<sup>ST</sup> SEMESTER 2015/2016 ACADEMIC YEAR

**COURSE CODE: IIT 3432** 

COURSE TITLE: CAPSTONE COMPUTING RESEARCH

EXAM VENUE: STREAM: COMPUTER SECURITY & FORENSICS

DATE: EXAM SESSION: 2 HOURS

TIME:

### **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 1 [30 marks]

- a) An abstract allows you to elaborate upon each major aspect of the project and helps readers decide whether they want to read the rest of the project. Therefore, enough key information must be included to make the abstract useful to someone who may want to examine your work. Briefly discuss the important things to include in an abstract? (4 marks)
- b) One of the most challenging issues in academic writing is locating useful sources in your research. You will encounter these when you begin working on your thesis. Briefly discuss at least 7 useful sources of material for your research. Please be specific.(7 marks)
- c) When writing your research proposal you are all encouraged to format your document using the APA style format guidelines. Briefly discuss five things that form part of the guidelines.
   (10 marks)
- d) Identify the differences between a concept paper and a project proposal. In your answer should include the main components/sections of each document. (9 marks)

### Question 2 [20 marks]

a) You are working on your project proposal for the course IIT 3432 Capstone Computing Research. Your project involves building a database as a back end for the stand alone application. Discuss the methodology you would adopt for this type of application based project. In your discussion include the steps you would follow.

(10 marks)

**(10 marks)** 

b) What is a virtual world? Briefly discuss the advantages and disadvantages of providing decision support through virtual world?

### Question 3 [20 marks]

You have been asked to carry out a research on the impact/effect of taking Web technology class on successfully completing a Web-based project. You decide to carry out a survey among Computer Forensic Students. Answer the following questions:

i)	Develop a problem statement for your research	(2 marks)
ii)	Identify any two objectives	(4 marks)
iii)	Develop two research questions from the objectives above	(4 marks)
iv)	Discuss the methodology you would use	<b>(10 marks)</b>

# Question 4 [20 marks]

You have been offered a job as a Technical Information Officer inchard of marketing department with a start up online marketing organization based in Nairobi Kenya. You have been asked to induct new trainees on the process of research. Identify the key components of a research process that you feel the new inductees should know. Assume they will conduct research type of projects.

**(20 marks)** 

## Question 5 [20 marks]

Among the key ingredients for a research project is the Introduction and discussion.

i) Briefly discuss three important things that must be included in an introduction?

(6 marks)

ii) Explain four important things that must be included in the discussion section

**(14 marks)**