## THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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### MAIN EXAMINATION

#### **JANUARY – APRIL 2018 TRIMESTER**

#### **FACULTY OF SCIENCE**

# DEPARTMENT OF COMPUTER AND LIBRARY SCIENCE

### **REGULAR PROGRAMME**

DIT 007: INTRODUCTION TO WEB DESIGN AND DEVELOPMENT

Date: APRIL 2018 Duration: 2 Hours
INSTRUCTIONS: Answer Question ONE and any other TWO Questions

Q1. a) i) Explain any of the three Internet Accesses? (3 Marks) ii) What is Transmission Control Protocol (TCP/IP)? (3 Marks) What is the difference between Internet and World Wide Web? iii) (3 Marks) Uniform Resource Locators is a four-part addressing scheme that b) i) tells the Web browser; (4 Marks) What are the four layers of TCP/IP Model? (4 Marks) ii) Domain name space is divided into three categories; namely iv) (3 Marks) What is bandwidth? c) i) (3 Marks) Explain the two sides of SMTP (Simple Mail Transfer Protocol) ii) (4 marks) What is web security? (3 Marks) iii)

Q2. Explain the three aspects of data security? (6 Marks) a) b) What is the difference between synchronous and asynchronous delivery methods of e-learning? (4 Marks) c) Explain any of the five open source software? (10 Marks) Q3. What is the difference between webpage, website, web server, and search a) engine? (8 Marks) How does HTTP works b) (5 Marks) How Does Telnet Work? c) (7Marks) Q4. a) Explain any of the four Criteria for Evaluation of Web Resources (8 Marks) Explain the three basic components of a search engine? (6 Marks) b) c) To address the need for more information, marketing companies are developing new methods for collecting data which has led to the introduction of several new technologies to assist in the information gathering process. These Internet-based technologies includes? (6 Marks) Q5. a) Most people don't want three dozen search engines, especially people who are not trained internet users. Most people want a single search engine that delivers three key features, namely; (6 Marks) Explain the Internet Technology Trends That Will Transform the Customer b) Experience? (6 Marks) c) Describe any of the four Importance of Bulletin Boards (8 Marks)