

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

# SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

# DEPARTMENT OF COMPUTER SCIENCE & SOFTWARE ENGINEERING

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

# 2ND YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR

# KISUMU LC

# COURSE CODE: IIT 3214

# COURSE TITLE: WEB APPLICATION TECHNOLOGIES

# EXAM VENUE: STREAM: COMPUTER SECURITY & FORENSICS

# DATE: EXAM SESSION:

# TIME:

# INSTRUCTIONS

# Answer Question 1 (Compulsory) and ANY other TWO questions

# Candidates are advised not to write on the question paper

# Candidates must hand in their answer booklets to the invigilator while in the examination room

**Question 1 [30 marks]**

1. A blog is …… (2 marks)
2. Explain the difference between website and a web application (2 marks)
3. What is meant by backend in web technologies? (2 marks)
4. What is the function of a web browser? (2 marks)
5. List any three web frameworks (3 marks)
6. Differentiate between a website and a web application (2 marks)
7. Define cookies (2 marks)
8. What is a web server? Give an example (2 marks)
9. What is the difference between web server and a web browser? (2 marks)
10. List the three fundamental elements of a web system (3 marks)
11. Differentiate between absolute path and relative path as used to reference a web resource on a web-server (3 marks)
12. List any three web server applications (3 marks)
13. State any two features of blogs (2 marks)

**Question 2 [20 marks]**

1. What does a DNS stand for? What is its main purpose? (2 marks )
2. Draw a well labeled diagram of URL, clearly showing the Http, domains, paths and briefly explain the work of the two protocols stated above (8 marks)
3. Explain any three factors to consider while adopting specific web technologies (6 marks )
4. List any four popular web technology stacks in the market (4 marks)

**Question 3 [20 marks]**

1. List any five server-side scripting languages (5 marks)
2. With help of a simple diagram, explain briefly the 3-tier architecture (6 marks)
3. List and explain the three main types of web applications? (9 marks )

**Question 4 [20 marks]**

1. Which of the protocol is used to send and receive emails? (2 marks)
2. Briefly, explain how Web applications maintain client state on the server (4 marks )
3. With examples differences between Client-side and Server-side Scripting (8 marks)
4. List and any six applications of blogs (6 marks)

**Question 5 [20 marks]**

1. List and explain any ten security attacks on web based applications (20 marks)