



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

- 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) A blog is (2 marks)
- b) Explain the difference between website and a web application (2 marks)
- c) What is meant by backend in web technologies? (2 marks)
- d) What is the function of a web browser? (2 marks)
- e) List any three web frameworks (3 marks)
- f) Differentiate between a website and a web application (2 marks)
- g) Define cookies (2 marks)
- h) What is a web server? Give an example (2 marks)
- i) What is the difference between web server and a web browser? (2 marks)
- j) List the three fundamental elements of a web system (3 marks)
- k) Differentiate between absolute path and relative path as used to reference a web resource on a web-server (3 marks)
- l) List any three web server applications (3 marks)
- m) State any two features of blogs (2 marks)

Question 2 [20 marks]

- a) What does a DNS stand for? What is its main purpose? (2 marks)
- b) 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)
- c) Explain any three factors to consider while adopting specific web technologies (6 marks)
- d) List any four popular web technology stacks in the market (4 marks)

Question 3 [20 marks]

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

Question 4 [20 marks]

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

Question 5 [20 marks]

- a) List and explain any ten security attacks on web based applications (20 marks)