



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BSC ICT**  
**2<sup>ND</sup> YEAR 1<sup>ST</sup> SEMESTER 2016/2017 ACADEMIC YEAR**  
**MAIN CAMPUS**

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**COURSE CODE : IIT 3214**  
**COURSE TITLE : WEB APPLICATION TECHNOLOGIES**  
**EXAM VENUE : STREAM :**  
**DATE : APR 2017 EXAM SESSION :**  
**TIME :**

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**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 ONE 30 MARKS**

- a) Define the following terms as used information communication technology (10 marks)
- i. HTTP
  - ii. Server
  - iii. Client
  - iv. Web Page
  - v. Web Development
- b) What are the differences between the Internet and the World Wide Web? (4 marks)
- c) Identify any **FOUR** basic features of a web Browser (4 marks)
- d) Identify any FOUR major functions of a web server. (4marks)
- e) Explain the concept of security with respect to the World Wide Web (8 marks)

### **QUESTION TWO 20MARKS.**

- a) What is a web browser? (2 marks)
- b) Explain any **FOUR** factors that must be taken into consideration when Selecting a web Browser (8 marks)
- c) Compare and contrast between the Google chrome and Mozilla Firefox web browsers in terms of their strengths and weaknesses (8 marks)

### **QUESTION THREE 20MARKS.**

- a) A friend has just bought a new computer and needs an internet connection at home. Advice on the hardware, software and other requirements for him to connect to the internet and start conducting email correspondence and web searching. (4 marks)
- b) Jane wants to access information from her collage's website ([www.jooust.ac.ke](http://www.jooust.ac.ke)) from her laptop running on Windows 7 and Mozilla Firefox version 57 (English).
- i. Using a sketch explain the **HTTP Request/Response Model** (6 marks)

- ii. Write & explain each line the **Valid HTTP Request/Response messages**  
(10marks)

**QUESTION FOUR 20MARKS.**

- a) Briefly explain how a JavaScript can be used in design of web applications (6 marks)
- b) Using examples Compare and contrast Client-side & Server-side Technologies (6 marks)
- c) State any THREE major Advantages of using JavaServlets (8 marks)

**QUESTION FIVE 20 MARKS**

- a) Using a sketch explain the JavaServer Pages page translation & processing phases (12 marks)
- b) Using FOUR examples Compare and contrast between JavaServer Pages (JSP) and Active Server Page (ASP) (8 marks)