**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**

**DEPARTMENT OF INFORMATION SYSTEMS AND TECHNOLOGY**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS INFORMATION SYSTEMS**

**2nd YEAR 2rd SEMESTER 2017/2018 ACADEMIC YEAR**

**MAIN CAMPUS**

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**COURSE CODE:    IIT 3214**

**COURSE TITLE:    WEB APPLICATION TECHNOLOGIES**

**EXAM VENUE:        STREAM: BSC BUSINESS INFORMATION SYSTEMS**

**DATE:                                          EXAM SESSION:**

**TIME:                        2.00 HOURS    80 students**

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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) Differentiate between the Internet and World Wide Web **[2Marks]**
b) Explain the following:
    i. HTTP **[1Mark]**
    ii. URL **[1Mark]**
    iii. CGI **[1Mark]**
    iv. CSS **[1Mark]**
    v. JavaScript **[1Mark]**
    vi. PHP **[1Mark]**
    vii. Web application **[1Mark]**
c) Define the following web terminologies **[2Marks]**
    i. Web browser
    ii. Web server
d) Distinguish between client-side and server-side scripting **[2Marks]**
e) State two examples in each of the technologies used for web designing as listed below.

    i.    Markup Languages. **[1Mark]**
    ii.   Style sheet Languages **[1Mark]**
    iii.  Client-side scripting **[1Mark]**
    iv.  Server-side scripting **[1Mark]**
    v.   Database technologies **[1Mark]**

**f)** When employees use the internet at work, they expose organizations to an array of security threats. State four such types of threats. **[2Marks]**

g) List four common issues that designers have to face during web design and development. **[4Marks]**
h) We browser are the underlying execution platform shared between web applications. State five major web browsers **[5Marks]**

i) There are two basic aspects to any web pages found on the internet. State these two aspects **[1Marks]**


## QUESTION TWO (20 MARKS)
a) Describe the client-server model **[5Marks]**
b) Explain how a browser makes a request and receives a response **[4Marks]**
c) Use a clear diagram to explain the ties of web based architecture. **[9Marks]**
d) Briefly explain the following:
    i.    Internet Information Services (IIS) **[1Mark]**
    ii.   Apache **[1Mark]**

**QUESTION THREE (20 MARKS)**

    a) Demonstrate the PHP and mySQL code for connecting to a database     **[12Marks]**

    b) Examine the following parts of a URL     **[8Marks]**

            http://www.jooust.ac.ke/

**QUESTION FOUR (20 MARKS)**

    a) Explain the following:

        i.    XML     **[1Marks]**

        ii.    DTD     **[1Marks]**

    b) Describe the basic JavaScript syntax     **[8Marks]**

    c) Distinguish between the following websites.     **[6Marks]**

    d) Static website, Dynamic website and Content Managed website

    e) State and briefly describe two most common **HTTP** request methods     **[4Marks]**