



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
INFORMATION AND COMMUNICATION TECHNOLOGY**

II YEAR II SEMESTER 2015/2016 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: ICT 3414

COURSE TITLE: WEB APPLICATION TECHNOLOGIES

EXAM VENUE: STREAM: ICT

DATE: EXAM SESSION:

TIME: 2.00 HOURS

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) Discuss any five types of server-side technologies. (5 MARKS)
- b) Briefly discuss on how to maintain security within the internet (5 MARKS)
- c) Explain how the emergence of internet/web technology influence changes on business scope, function and operation (5 MARKS)
- d) Assess critical issues related with interactions between clients and server (5 MARKS)
- e) Describe how the following technologies are applied to create interface on the web.
a) HTML b)XHTML C) DOM D)SGML (5 MARKS)
- f) Explain how the URL and the DNS works on the web. (5 MARKS)

QUESTION TWO 20 MARKS

- a) Discuss briefly on the following security measures. (10 MARKS)
 - a) Authentications
 - b) Cryptograph
 - c) Digital signature
 - d) Fire walls
- b) Explain the impact of internet/web technology on the following operations:
 - a) Research practices
 - b) Long distance learning
 - c) Crafting business strategies (10 MARKS)

QUESTION THREE 20 MARKS

- a) Explain how the web server and a client interacts using HTTP request and responses (10 MARKS)
- b) Write short notes on the following common internet protocols:
- (i) TCP/IP
 - (ii) FTP
 - (iii) HTTP (10 MARKS)

QUESTION FOUR 20 MARKS

- a) Identify and explain the advantages and disadvantage of SGI and Java Script on web application technology (10 MARKS)
- b) List and explain the steps involve in developing a web site and also describe on how to create interaction on the sites (10 MARKS)

QUESTION FIVE 20 MARKS

- a) Provide a sketch diagram showing the output when the following code is executed :

```
<html>
<body bgcolor ="pink" text="blue">
<table width=20 height=20 border=4>
<caption><u><b>Customer Particulars</b></u></caption>
<tr>
<th>Name<name></th>
<th>Height</th>
<th>Likes</th>

</tr>
<tr>
<td>Edward</td>
<td>5.8</td>
<td>Ugali</td>
</tr>
```

```
<tr>
<td>Gideon</td>
<td>5.9</td>
<td>Fish</td>

</tr>
</table>
<a href="edu2.html" >click</a>
<marquee>Order for the food you prefer :Thank you</marquee>
</body>
```

(10 marks)

b) Discuss the differences between GET and POST method (10 marks)