



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

## *Faculty of Engineering and Technology*

### DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY  
(DICT 2K 9J)

**EIT 2303: INTERNET APPLICATION PROGRAMMING**

**END OF SEMESTER EXAMINATIONS**

**SERIES: AUGUST/SEPTEMBER 2011**

**TIME: 2 HOURS**

#### **Instructions to Candidates:**

This paper consist of **TWO** sections **A** and **B**

Answer question **ONE (COMPULSORY)** and any other **TWO** questions from the list of questions below

This paper consists of **FOUR** printed pages

**SECTION A (30 MARKS) – Answer all Questions in this section**

**Question 1 (Compulsory)**

- a) Explain the purpose of the following protocols (4 marks)
- (i) Client-server protocol
  - (ii) Hypertext Transfer Protocol
- b) (i) State the importance of hyperlinks in a web pages (2 marks)
- (iii) State the **TWO** HTML elements that you need to specify to enable hyperlinks. State the tag for each element (6 marks)
- c) (i) Explain the term Internet (1 mark)
- (ii) Describe the function of Web Browsers (3 marks)
- d) List and explain **TWO** uses of cookies in Internet application programming (4 marks)
- e) (i) State any **TWO** web authoring tools (2 marks)
- (ii) Explain how asp tags are entered in asp document (2 marks)
- f) Write a Java Script that will output the following text: (4 marks)

*Welcome to my homepage!  
This is JavaScript!*

- g) State any **TWO** rules for naming variables in java script (2 marks)

**SECTION B – Answer any TWO questions**

**Question 2 (20 marks)**

- a) Differentiate between dynamic and static web pages (4 marks)
- b) State any **FOUR** characteristics of a good web application design (4 marks)
- c) Name any **FOUR** web security issues affecting web application today (4 marks)
- d) Using a while iteration structure write a java script codes that prints 10 integers (0,1,2,3,4,5,6,7,8,9) in a form after a click event Run as shown below (8 marks)

### Question 3(20 marks)

- a) List and briefly explain **THREE** components of client-server architecture (3 marks)
- b) Describe a Cookie (2 marks)
- c) Outline **FOUR** advantages of client server architecture (4 marks)
- d) Using an appropriate URL, list and briefly explain its components or parts (4 marks)
- e) State any key principles on how to organize documents and information on the web (3 marks)
- f) Study the following piece of java script codes and give its output (4 marks)

```
<html>
<body>
<script type= "text/javascript">
Var x;
x=5+5;
document.write(x);
document.write("<br/>");
x="5"+ "5";
document.write(x);
document.writer("<br/>");
x=5+ "5";
document.write(x);
document.write("<br/>")
x= "5"+5;
document.write(x);
document.write("<br/>");
</script>
</body>
</html>
```

### Question 4(20 marks)

- a) Analyse the following piece of codes and give its output (3 marks)

```
<script language= "javascript">
document.write("checkin gif 5 is less than 6....");
if (5<6{
    document.write("<br>condition is true:5 is less than 6");
}
document.write ("<br>Done checking");
</script>
```

- b) What do we mean by the statement that java script is loosely typed? (2 marks)
- c) State any **THREE** advantages of Java script over HTML in web development (3 marks)

d) Define a HTML page that will produce content which has the following layout:

**Some useful sites**

Click on the link to go to that page

o ASP

o Cloud Computing

i. A.I

ii. Freeware

iii. Shareware

iv. Iscript

(12 marks)

**Question 5 (20 marks)**

- a) State the **THREE** main Java script data types (3 marks)
- b) Describe any **TWO** conditional operators as used in Java script (4 marks)
- c) Using an appropriate diagram, explain how an Internet application works (5 marks)
- d) Differentiate between write and alert methods as used in Java script. Give an example of each. (6 marks)
- e) Using appropriate HTML tags, outline HTML document structure (2 marks)