MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY
DEPERTAMENT OF INFORMATION TECHNOLOGY
CIT 3301 INTERNET APPLICATION PROGRAMMING SUPPLEMENTARY

QUESTION 1 (30 Marks)

a. Describe features of JavaScript.   (6 mks)

b. Write HTML script to display the table below, specifying the width and border attributes to 50% and 5 respectively.   (4marks)

Number	Name	Age
1001	Peter	34
1002	Mary	26

c. Outline the importance of the following tools when developing internet applications: (6 mks)
    i.   PHP
    ii.   JavaScript
    iii.   HTML

d. Using syntax, describe two ways to create arrays in JavaScript.   (6 mks)

e. In PHP, distinguish between echo and print.   (2 mks)

f. What is the difference between POST and GET when submitting forms?   (4 mks)

QUESTION 2 (20 Marks)

a. Describe any three security issues that can affect internet applications.   (6 mks)

b. Distinguish between: (4 mks)
    i.   Static web pages and dynamic web pages
    ii.   Client side programming and server side programming

b. Write JavaScript code to create form with 4 textboxes, then a JavaScript code should be used to verify that all textboxes have been filled. If a Textbox has been left empty, an alert should display the message "empty box".   (4 marks)

c. Give the function of the following PHP statements: (6 mks)
    i. $cars = array("Volvo", "BMW", "Toyota");
    ii.   function setHeight($minheight = 50) { echo "The height is : $minheight
"; }
    iii. $conn = new mysqli($servername, $username, $password, $dbname);

QUESTION 3 (20 Marks)

a. List the three image formats supported in web pages.   (3 marks)

b.   JavaScript identifies each object on a web page by naming them using a structured hierarchy called Document Object Model. Use a diagram to describe JavaScript DOM object hierarchy. (5 marks)

c. Give the function of the following with respect to internet communication: (6 marks)
    i.   DNS server
    ii.   IP address
    iii.   URL

d. Give the syntax in JavaScript of the following: (6 mks)
    i.   Display "Hello World"

ii.   Insert JavaScript in an .html file

iii.   Display an alert box with the message "Hello World"

QUESTION 4 (20 Marks)

a. Explain the tier 1, tier 2 and tier 3 architectures of web applications.   (6 mks)

b. Give the organization responsible for making the Web standards.   (2 mks)

c. Write a PHP code to assign 2 numbers to variables, add the two numbers and display the result.

(4 marks)

d. Write the HTML code that generates the following output (Note: make assumptions on the names of the images to be inserted)   (8 mks)

QUESTION 5 (20 Marks)

a. Write the JavaScript code to validate the form in the figure in Q4 (d).   (10 mks)

b. Write the MySQL code to perform the following tasks (Note: make assumptions on the database, table and column names):

    i.   Insert three textfields values from a form to a database's table   (3 mks)

    ii.   Connect to a user created database   (3 mks)

    iii.   Retrieve values from a table that has four columns   (4 mks)