KISII UNIVERSITY- KERICHO CAMPUS

COURSE CODE: BINT 0212 UNIT NAME: WEB DEVELOPMENT

Question one [25 marks]

i. Define the following terms as used in web development
    i. Website   [2 marks]
    ii. Website planning   [2 marks]
    iii. Website design   [2 marks]
    iv. Website construction   [2 marks]
    v. Traffic   [2 marks]
ii. Briefly discuss the factors to consider when choosing formats of content to publish on your website: [8 marks]
iii. Give four differences between widgets and Mashups as content options

[4 marks]

iv. The following are html tags, state what each tag does
    i.   [1 mark]
    ii.   [1 mark]
    iii.   [1 mark]
    iv.   [1 mark]
    v. <marquee></marquee>   [1 mark]

Question two [15 marks]
a. Briefly discuss the steps followed in website design process   [6 marks]
b. Write a PHP code to display the following statement *Welcome Kisii University, University of the 21st century*   [5 marks]
c. What is navigation? And why is it essential in website design?   [4 marks]

Question three [15 marks]
a. Provide an entire HTML code to produce the same output in the diagram below. Comment where necessary   [10 marks]

This is heading 1

This is heading 2

This is heading 3

This is heading 4

This is heading 5

This is heading 6

[10 marks]
b. Using appropriate examples differentiate between the following terms as used HTML
    i. HTML Tag vs. Element   [2 marks]

ii. The Id Attribute vs the tittle Attribute [3 marks]

Question four [15 marks]
a. CSS is a styling language that has its own syntax rules, identify three ways that it can be added directly to any HTML element. [3 marks]
b. Identify any two advantages and disadvantages of client-side scripting [4 marks]
c. Identify four benefits of CSS [4 marks]
d. Write a simple PHP code embedded in an html file that will display the message "Welcome server-side scripting" [5 marks]

Question five [15 marks]
a. Identify four features of a web [4 marks]
b. Identify and discuss five different programming technologies used in server-side development [5 marks]
c. Discuss Document Object Model with reference to html [6 marks]

Question six [15 marks]
a. What do the following acronyms stand for?
   i. WAMP software stack [2 marks]
   ii. AJAX [2 marks]
   iii. WISA software stack [2 marks]
b. Identify the differences between "GET" and "POST" method [4 marks]
c. Briefly discuss three ways of inserting a CSS style sheet into a HTML file
[5 marks]

MARKING SCHEME
Question one

a.

    i.   Client side scripting–refers to operations that are performed by the client in a client-server relationship in a computer network.

    ii.   Server side scripting – is a technique used in web development which involves employing scripts on a web server which produce a customized for each user's request to the website.

    iii.   PHP - is a server scripting language, and a powerful tool for making dynamic and interactive Web pages. PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP.

    iv.   CGI (Computer-generated Imagery) – is the creation of still or animated visual content with imaging software.

    v.   Dynamic website – contains web pages that are generated in real time.

b.

    i.   Planning: Decide why you want a website and what to create.

    ii.   Content: Create a list of the content you want.

    iii.   Design: Create a design for displaying the content.

    iv.   Construction: Write the code and load up your content.

    v.   Test: Make sure everything works properly.

    vi.   Hosting: Choose a domain name & find a place to put your site on the internet.

    vii.   Publicity: Build traffic via publicity the site.

    viii.   Review: Review the site at intervals it to make sure it succeeds.

c.

Static website pages	Dynamic Website pages
a. Displays the exact same information whenever anyone visits it. b. Every visitor is greeted with the same text and media.	i. Capable of producing different content for each individual visitor. ii. Website can display different content depending on the operating system of the visitor.

d.

    i.   <p></p> - This tag represents a paragraph

    ii.   - Defines bold text

    iii.   <i></i> - Defines a part of text in an alternate voice or mood

    iv.   <body></body> - This tag represents the document's body which keeps other HTML tags like <h1>, <div>, <p> etc.

    v.   <table></table> - Defines a table

Question two

a.

    i.   External style sheet - With an external style sheet, you can change the look of an entire website by changing just one file. Each page must include a reference to the external style sheet file inside the <link> element. The <link> element goes inside the <head> section

ii. Internal style sheet - An internal style sheet may be used if one single page has a unique style. Internal styles are defined within the <style> element, inside the <head> section of an HTML page

iii. Inline style - An inline style may be used to apply a unique style for a single element. To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

b.

c.

   i. CSS describes how HTML elements are to be displayed on screen, paper, or in other media

  ii. CSS saves a lot of work. It can control the layout of multiple web pages all at once

  iii. External stylesheets are stored in CSS files

d.

```
<!DOCTYPE html>

<html>

<body>

<?php

echo "My first PHP script!";

?>

</body>

</html>
```

Question three

  a.

    i. Rich user experience
    ii. User as contributor
    iii. User participation
    iv. Basic trust

  b.

   i. **PHP** is a server scripting language, and a powerful tool for making dynamic and interactive Web pages.PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP.

  ii. ASP stands for Active Server Pages, ASP is a Microsoft Technology, ASP is a program that runs inside IIS, IIS stands for Internet Information Services.

  iii. ASP.NET 4 is a development framework for building web pages and web sites with HTML, CSS, JavaScript and server scripting.ASP.NET 4 supports three different development models: Web Pages, MVC (Model View Controller), and Web Forms

  c.

When an HTML document is loaded into a web browser, it becomes a document object.The document object is the root node of the HTML document and the "owner" of all other nodes: (element nodes, text nodes, attribute nodes, and comment nodes).

Question four

a.
    i.   WAMP software stack -Windows, Apache, MySql and PHP
    ii.   AJAX - Asynchronous JavaScript and XML
    iii.   WISA software stack -

b. $_GET is an array of variables passed to the current script via the URL parameters and $_POST is an array of variables passed to the current script via the HTTP POST method.

c.
    i.   External style sheet - With an external style sheet, you can change the look of an entire website by changing just one file. Each page must include a reference to the external style sheet file inside the <link> element. The <link> element goes inside the <head> section
    ii.   Internal style sheet - An internal style sheet may be used if one single page has a unique style. Internal styles are defined within the <style> element, inside the <head> section of an HTML page
    iii.   Inline style - An inline style may be used to apply a unique style for a single element. To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

Question five

a.

```
<!DOCTYPE html>
<html>
<body>

<form>
  First name:<br>
  <input type="text" name="firstname">
  <br>
  Last name:<br>
  <input type="text" name="lastname"></br>
<input type = "button" value ="Submit">
</form>
</body>
</html>
```

b.
    Welcome <?php echo $_POST["firstname"] . echo $_POST["lastname"]; ?>

Question six

a.
    i.   - Defines an ordered list

    ii.   \<title>\</title> - Defines a title for the document

   iii.   \<a>\ - Defines a hyperlink

   iv.   \<div>\</div> - Defines a section in a document

    v.   \<footer>\</footer> - Defines a footer for a document or section

b.

     i.   Number - var length = 16;

    ii.   Boolean–var status = true;

   iii.   Array - var cars = ["Saab", "Volvo", "BMW"];

   iv.   Objects - var x = {firstName:"John", lastName:"Doe"};

    v.   String–var lastName = "Johnso