

2920/304  
INTERNET BASED PROGRAMMING  
July 2016  
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL  
DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE III

INTERNET BASED PROGRAMMING

3 hours

**INSTRUCTIONS TO CANDIDATES:**

*Answer any FIVE of the following EIGHT questions in the answer booklet provided.*

*ALL questions carry equal marks.*

*Candidates should answer the questions in English*

**This paper consists of 5 printed pages.**

**Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

1. (a) Outline the function of each of the following tags as used in HTML. (4 marks)
- (i) `<!...>`
  - (ii) `<a>`
  - (iii) `<frameset>`
  - (iv) `<strike>`
- (b) Mwaniki has been contracted to design a website for a company. Explain **three** approaches that he is likely to use to achieve his goal. (6 marks)
- (c) The following is a HTML code. Use it to answer the questions that follow:

```
<html>
<table border=1 cell spacing=10 cell padding=5>
  <tr>
    <td>
      Name 1
    </td>
    <td>
      Name 2
    </td>
  </tr><tr>
    <td>
      Name 3
    </td>
    <td>
      Name 4
    </td>
  </tr>
</table>
</html>
```

- (i) Explain the function of each of the following as used in the code. (4 marks)
- I. cell spacing;
  - II. cell padding .
- (ii) Sketch the output when the code is run in a browser (4 marks)
- (iii) Rewrite a HTML statement that would be used to change the background of the area with the text *Name 4* to blue. (2 marks)
2. (a) Describe the term *web authoring software* as used in web design. (2 marks)
- (b) Explain the function of each of the following features found in a *web authoring tool*. (6 marks)
- (i) Template;
  - (ii) CGI web forms;
  - (iii) Site manager.
- (c) Explain **three** factors to consider when adding graphics to a web page during web design. (6 marks)
- (d) With the aid of an example in each case, describe **two** types of dialogue boxes that would be used to respond to a user in JavaScript. (6 marks)



5. (a) The following table was created using HTML.


Describe the attributes that have been used to modify the table so as to appear as shown in (i) and (ii). (4 marks)

(i)


(ii)


- (b) Explain a circumstance that may make a web designer to use *definition lists* during web development. (2 marks)
- (c) Explain **three** benefits that would be achieved when using a WYSIWYG editor to create a web site. (6 marks)
- (d) Write a HTML code that will display the following list when run in a browser. (8 marks)

### ***PROCEDURE FOR BAKING***

- o Gather ingredients
- o Mix ingredients together
- o Place ingredients in a baking dish

Before you place the ingredients in the baking dish, preheat the oven to 180 degrees

4. Bake in oven for an hour
5. Remove from oven
6. Allow to stand for ten minutes
7. Serve

6. (a) (i) Outline **three** factors used when determining the *datatype* of variables declared in JavaScript. (3 marks)
- (ii) In a JavaScript program, a variable x stores a value 5. Determine the output from each of the following statements: (3 marks)
- I. `x == "5"`
  - II. `x != 8`
  - III. `x > 8`
- (b) Explain **three** benefits of *ASP* language as used in web development. (6 marks)
- (c) Donny, a web designer has opted to use list tags to itemize the information instead of typing the ranks manually. Explain **two** benefits she would achieve from this (4 marks)

- (d) Mary a web developer would like to develop a web site. Outline **four** factors that she should consider when choosing the appropriate programming language to use. (4 marks)
7. (a) Outline **four** advantages of using *Common Gateway Interface* in web programming. (4 marks)
- (b) The following is a HTML statement. Use it to answer the questions that follow:  
``
- (i) State the function of each of the following attributes: (2 marks)  
I. alt  
II. src
- (ii) Rewrite the statement so as to display the output on the right hand side of the page. (2 marks)
- (c) Distinguish between the term *uploading* and *downloading* as used in the internet. (4 marks)
- (d) (i) Describe the term *site map* as used in web design. (2 marks)  
(ii) Explain **three** benefits of using site maps during when developing a web site. (6 marks)
8. (a) Outline **four** reasons for testing a web site before launching. (4 marks)
- (b) State the difference between *Hypertext Transfer Protocol (HTTP)* and *Hypertext Transfer Protocol over Secure Socket Layer (HTTPS)* as used in the internet. (4 marks)
- (c) Describe each of the following threats to information in the internet. (6 marks)  
(i) Phishing;  
(ii) Spyware;  
(iii) Pharming.
- (d) The following are links in a website. Use it to answer the questions that follow:  
www.animal/picture1.jpeg  
www.animal/categories.html  
www.animals/parks.html
- Write a HTML code that would be used to display the content of the links on a Frame having three rows of heights 20%, 60% and 20% respectively when run on a browser: (6 marks)

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