COMPUTER STUDIES
Paper 1
(THEORY)
(Reading Time: 15 minutes)
(Writing Time: Three hours)
(Maximum Marks: 100)

This paper consists of **TWO** sections: **Section A** and **Section B**.
Section **A** is **COMPULSORY**. Attempt **ANY FIVE** questions
out of **SEVEN** questions from Section B.
All working, including rough work should be done on the same sheet as the rest of the answer.
The intended marks for questions or parts of questions are given in brackets [ ].

SECTION A [50 MARKS]
(Attempt ALL questions.)

Question 1   [10 x 1 = 10]
Directions: Each question in this section is followed by four possible choices of answers.
Choose the correct answer and write it down in the answer booklet provided.

a)   Which one of the following is true about HTML?

    A   It is a programming language.
    B   It is a markup language.
    C   It is a makeup language.
    D   It is a scripting language.

b)   Which one of the following attributes allows the user to choose more than one of severa
    choices in HTML forms?

    A   Radio.
    B   Option.
    C   Select.
    D   Checkbox.

c)   Which one of the following is an empty tag?

    A   Line Break.
    B   Paragraph.
    C   Listing.
    D   Superscript.

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d) Choose the correct HTML tag for the largest heading.

    A   <H6>
    B   <H2>
    C   <H1>
    D   <H4>

e) The tag used to draw a horizontal line across the window in HTML document is

    A   <HR>
    B   <RL>
    C   <HL>
    D   <Line>

f) The following are the search engines EXCEPT

    A   Google.
    B   Yahoo.
    C   Druknet.
    D   Rediff.

g) Which of the following is supported by all browsers?

    A   VBScript.
    B   JavaScript.
    C   ActiveX.
    D   Perl.

h) The one which tells the browser what to do when a certain action occurs is

    A   Object.
    B   Method.
    C   Attribute.
    D   Event handler.

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i) What will be the output of the following script?

```
var i=0, c=10;
do  {
c--;
i++;
}  while(i<1);
alert("Loop stops at  "+i+" and c is now"+ c);
```

    A   Loop stops at 1 and c is now 9
    B   Loop stops at 10 and c is now 10
    C   Loop stops at 9 and c is now 10
    D   Loop stops at 9 and c is now 9

j) `document.write(Math.round(6.8));` will result

    A   6
    B   7
    C   8
    D   9

Question 2 [10 x 1 = 10]

Directions: Fill in the blanks with appropriate words or phrases.

a) When a tag is placed within another tag, they are known as ………………………….. tags.
b) All HTML files are stored with the extension …………………………...
c) ………………………….. creates a list of items, each of which is preceded by a bullet.
d) In `<a href=` http://www.allacademic.com`>`, href means ……………………..
e) …………………………. attribute specifies the amount of space in pixels, between the sides of a cell and its contents.
f) Making a web page as part of the web is called…………………..
g) The ISP in Bhutan at present, where we can register domain names is …………………
h) CGI stands for ……………………...
i) The…………………………….tag is used to insert a script block into a HTML page.
j) The index of the fourth element in the array: `cars = new Array(5);` is……………….

Question 3   [15 x 2

Directions: While answering the questions, indicate briefly, your working and reasoning wherever required.

a)   Differentiate between tags and attributes with an example.

b)   Write HTML code to generate the following table.

c)   Write the output of the below code:

```
<FRAMESET ROWS = "2*,*">
```

d)   Give appropriate codes to produce the following form:

Name:

Password:

e)   Write down the possible ways to insert a picture into a HTML document.

f)   Give the difference between events and event handlers.

g)   Write a code to display the message "Opening Home Page" in the status bar of the window when the user places the cursor over a hyperlink named "Home Page".

h)
```
var name = prompt("enter your name" );
if(name.lenght<=20)
document.write("the name is quite good");
else
document.write("the name is too lengthy");
```

What will be the output of the above script if the entered name is "Sonam Zangpo Gyeltshen"?

i)   Write a script to add the first ten natural numbers and display the sum using for loop.

j)   Mention any two uses of arrays.

k)   Explain global and local variables in functions.

l)   How do you name variables?

m)   Convert the "45 Students" string to a number using conversion function.

n)   Describe the difference between `alert(m++)` and `alert(++n)`, if the initial value for both variables is 20.

o)   Write a code to display the current date in alert window.

SECTION B [50 MARKS]
Direction: Attempt any FIVE questions.

Question 4   **[10]**

a)   Explain the advantages and disadvantages of HTML   [3]

b)   Write HTML code to generate the following: [4]

   (i) $A^2+B^2 = C^2$

   (ii) C_2H_5OH

c)   What is a hyperlink? How is it created? Give an example.   [3]

Question 5   **[10]**

a)   Explain the use of # tag in HTML page with example.   [2]

b)   Write a HTML code that generates the following form: [5]

   Name: _____
   Gender: ○ Male ○ Female
   Address: _____ ⬍
   Qualification: ☐ 10 ☐ 12 ☐ Graduate

c)   Explain the differences among table, frame and form in HTML.   [3]

Question 6

a) What is marquee? How do you add a marquee to your HTML document with colour and
direction attributes? [3]

b) Write a code to show the use of ALINK and VLINK attributes with the <BODY> tag
and explain the difference between them. [3]

c) What are the steps required to make your web page as web server? [3]

d) Which tag is used to create menu controls? [1]

Question 7 [10]

a) List any three merits of JavaScript. [3]

b) What do you understand by testing and debugging a script? [2]

c) How do you include a single line and multiline comments in JavaScript? [1]

d) Using do-while loop, generate the following output: [4]

The square root of 1 is 1
The square root of 4 is 2
The square root of 9 is 3
The square root of 16 is 4
The square root of 25 is 5

Question 8 [10]

a) What is variable in JavaScript? Give two valid variable names. [2]

b) Write a script to display the even numbers as shown below: [4]

2 4 6 8 10
12 14 16 18 20
22 24 26 28 30
32 34 36 38 40
42 44 46 48 50

c)   Write a complete JavaScript code to demonstrate onMouseOver and onMouseOut event handlers with the two images "image1.gif" and "image2.gif".   [

Question 9   **[10]**

a)   Write a JavaScript program to assign the first 10 odd numbers as elements of an array using for loop to display the elements of the array.   [4]

b)
```
var m = 5, n= 3;
m = m+n;
docment.write(m);
m+=n;
document.writeln(m);
```

      i)   What will be the output of the above script?   [1]
      ii)   What is the purpose of document.writeln?   [1]

c)   Explain with an example how logical AND operator is used in JavaScript.   [2]

d)   Given font style "arial", size "4" and colour "Red". How do you apply in HTML document?   [2]

Question 10   **[10]**

a)   What is a function in JavaScript?   [2]

b)   How is the result obtained from a function?   [1]

c)   Use a function to write a script that accepts two numbers and assign the variables X and Y. If X is even number and Y is multiple of 4, it displays the message "X is an even number and Y is multiple of 4", otherwise it displays "X is neither an even number nor Y is multiple of 4".   [5]

d)   Write Math methods which:
      i)   rounds a number up.   [1]
      ii) returns a random number between 0 and 1   [1]

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