1. (a) Why do we need Compilers? [1]
(b) Differentiate between System Software and Application Software. Give one example of each. [2]
(c) Write any four application areas of Database Management System. [2]
(d) Hardware is of no use without an operating system. Justify this statement. [2]
(e) How do you think a web camera can improve the security of any organization? [2]
(f) What is the purpose of web browsers? Name any two browsers. [2]
(g) Write short notes on the following (do any four): [4]
   (i) Digital Versatile Disk
   (ii) Graphics Tablet
   (iii) Smart Card Reader
   (iv) Plotters
   (v) Android OS

2. (a) Distinguish between <BACKGROUND> and <BGCOLOR> tag with the help of an example. [2]
(b) Use CSS properties to display the following output: (The image used as background is “style.jpg” and text color is blue and border color is gray) [2]
(c) Write the DTD definition to store the following data: An element called “product” that has two sub types “description” and “price”, where description and price store data.

(d) Differentiate the following:
(i) `<A>` as anchor and `<A>` as link
(ii) Margin and padding properties of CSS
(iii) Inline and External CSS
(iv) `<Input type = "Text">` and `<TextArea>` tag
(v) `<UL>` and `<OL>` tag

(c) Name the attributes associated with the following tasks:
(i) The attribute that causes frame to takes its contents from some html file.
(ii) To change the sequence of the list items in an ordered list from numbers to uppercase letters.
(iii) To display the cell contents at the bottom of the cell of a table.
(iv) The attribute of a form which accepts the URL for the script that will process the data from your form.
(v) To have a 3 pixels thick blue coloured horizontal line for half the window in the center of the web page.

(f) Write HTML code to generate a web page in the format given below:
Consider the following while writing the HTML code:

(i) Background color of the page should be yellow, links should be pink and visited link should be purple.
(ii) Font of the page should be Arial.
(iii) Text color of main heading should be maroon.
(iv) Picture used in the page is saved as “food.jpg”.
(v) The text color of Royal Greens Restaurant in the paragraph should be red.
(vi) Lists are displayed as shown.
(vii) Pages are linked to Indian-indian.html, International-inter.html.
(viii) The table should have a border of 2 pixels.
(ix) The bottom message is of the size 13 pixels and the email id reserve@royalgreens.in is linked to send an e-mail.

3.
(a) Write any two rules for naming variables in VBscript. [1]
(b) What is the difference between sub procedure and function in VBscript? [1]
(c) Write the output of the following code:

```
<script language="vbscript">
Function Magic(a, b)
    a=a+b
    b=a-b
    Magic=a*b
End Function
Dim x, y
x=Magic(2, 4)
y=Magic(1, 2)
Document.write(cstr(x) & "<br>")
Document.write(cstr(y) & "<br>")
</script>
```

(d) Rewrite the following vbscript code after removing all errors and underline the each correction made: [2]

```
<script grammar="vbscript">
For I = 1 upto 10 stop 2
```

(3) محمود

P.T.O.
(e) Rewrite the following code using the if..then..else statement:

```javascript
Select case choice
Case 1,2,3
Document.write("Tiny Tots")
Case 4,5,6
Document.write("I am a sensible child")
Case 7,8,9
Document.write("I am independent")
Case else
Document.write("I can manage everything")
End select
```

(f) Write a function called `sumSeries()` which calculates and returns the sum of the following series:

\[ 2^2 + 3^2 + 4^2 + \ldots \ldots n^2 \]

Where ‘n’ is passed as an argument to a function.

(g) Write short notes on the following:

- Trim()
- Cdate()

(h) Write the output of the following statements:

```javascript
Document.write(Ucase(Mid("technology",3,2)))
Document.write(Instr("Multimedia","web"))
Document.write(((11+14)3^3))
Document.write(left("Miss World is an Indian",4) & right("Miss World is an Indian", 6))
```
(i) Consider the following web page:

Enter First Number
Enter Second Number
Result

Write a vbscript code to generate the above page along with the event handlers to display appropriate answers when any button (+, -, *, /) is clicked.

(j) Write a code to create a web page which accepts users date of birth and displays his age in years, on the click of a command button labeled 'Calculate'.

4. (a) Write any two applications of Multimedia.
(b) What do you understand by the term mask in Photoshop?
(c) Which feature is used to perform multiple undo operations in Photoshop?
(d) What is the main advantage of using layers in Photoshop?
(e) Which application is used to capture sounds in computer and create sound files?
(f) Expand the following:
   (i) MPEG (ii) MIDI
(g) Write short notes on:
   (i) Animation (ii) Morphing
(h) Differentiate between .GIF and .JPEG files. Which format would you use for web graphics and why?