1. (a) What is a DBMS? Give an example of a DBMS.  
(b) What is the difference between text and memo data types of MS-Access?  
(c) Study the following data and answer the questions given below:

**Table: Patient**

<table>
<thead>
<tr>
<th>Name</th>
<th>P_no</th>
<th>Date_Admm</th>
<th>Doc_no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mohan</td>
<td>P_101</td>
<td>21/03/2006</td>
<td>301</td>
</tr>
<tr>
<td>Priya</td>
<td>P_204</td>
<td>03/04/2006</td>
<td>134</td>
</tr>
<tr>
<td>Suraj</td>
<td>P_375</td>
<td>15/01/2006</td>
<td>204</td>
</tr>
<tr>
<td>Komal</td>
<td>P_424</td>
<td>24/06/2006</td>
<td>134</td>
</tr>
</tbody>
</table>

**Table: Doctor**

<table>
<thead>
<tr>
<th>Doc_no</th>
<th>Doc_Name</th>
<th>Speciality</th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>A.K. Sharma</td>
<td>Surgery</td>
</tr>
<tr>
<td>204</td>
<td>R. Khurana</td>
<td>Dentist</td>
</tr>
<tr>
<td>301</td>
<td>S. Shyam</td>
<td>Neurology</td>
</tr>
<tr>
<td>280</td>
<td>P. John</td>
<td>Dermatology</td>
</tr>
</tbody>
</table>

Please write down the serial number of the question before attempting it.
i. Name the field, which can act as the primary key for the table Patient and the table Doctor respectively.

ii. Name the field, which can act as the foreign key for the table Patient.

iii. What type of relationship exists between the table Patient and the table Doctor?

(d) What is the full form of MIDI?
(e) Differentiate between JPEG and MPEG file formats.
(f) What is animation?
(g) Name any two formats in which a Flash movie can be published.

2. Questions given below are based on Macromedia Flash:
   (a) Define the term Symbol.
   (b) What is the difference between hiding and locking a layer?
   (c) Explain how to insert sound in a Flash movie?
   (d) What do you understand by Frame Rate?
   (e) Observe the figure given below and do as directed:

   - The image on the right hand side shows the position and size of the image for frame 1.
   - The image on the left hand side shows the position and size of the image for frame 40.
   - The dotted line shows the path of motion of the ball.

   Write the procedure and property settings for animating the above scenario.

3. Questions given below are based on HTML:
   (a) What is the <DL> tag used for?
   (b) Name the tag and attribute used to set a checkbox as selected by default.
Write the HTML code to generate a Web Page in the format given below:

Consider the following while writing the HTML code:

1. Background colour of the page should be “Pink”, text color should be “Maroon” and link colour should be “Green”.
2. Title of the page is “Online Games”.
3. Text colour of main heading on the page should be “Red”.
4. Font face of text in the page should be “Arial”.
5. Picture used in the page is the file “game.jpg”.
6. Use the concept of nested list to display the given list.
7. Pages linked to:
   * Puzzle Games as “puzzle.html”
   * Card Games as “card.html”
   * Action Games as “action.html”
8. The table should have a caption “Games Buzz-Top 5”, a border of 2 pixels and the background color of the first row should be “Aqua”.

![Games Galore]

Welcome to Games Galore...the best online games site. You may view the content within this site using any client browser and you can download games to play them off-line.

Featured Games:

1. **Puzzle Games**
   - Tetris
   - Cubis
2. **Card Games**
   i. Solitaire
   ii. Hearts
3. **Action Games**
   a. Boom
   b. Final Assault

<table>
<thead>
<tr>
<th><strong>Games Buzz - Top 5</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Game</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Dominoes</td>
</tr>
<tr>
<td>Tetris</td>
</tr>
<tr>
<td>Boom</td>
</tr>
<tr>
<td>Cubis</td>
</tr>
<tr>
<td>Solitaire</td>
</tr>
</tbody>
</table>
4. Questions given below are based on ASP:
   (a) Differentiate between Client Side scripting and Server-side scripting.
   (b) Explain with example the usage of the QueryString collection of the Request object.
   (c) Differentiate between the Ad Rotator and Content Rotator components of ASP.
   (d) Give the usage and the object to which the following methods/properties belong:
       (i) Transfer
       (ii) Lock
   (e) Give output of the following statements:
       (i) Response . Write (LCase (Left ("STATEMENT", 4)))
       (ii) Response . Write (CInt (4+5/2-6*2) )
       (iii Response . Write (MonthName (Month (CDate ("02/0342006"))))

5. Questions given below are based on ASP:
   (a) Differentiate between an Read and ReadLine methods of the TextStream object.
   (b) Differentiate between Connection String and DSN connection to a database.
   (c) Rewrite, the following code after removing errors with each correction underlined.
       <% 
       dim num =12 
       b = 0 
       do num > 0 step 1 
       b = num mod 10 
       num = num - 2 
       next loop 
       document.write b 
       %> 
   (d) Give the output for the following code segment:
       <% 
       Y = 5 
       FOR X = 1 TO 5 
       IF X > Y THEN
(e) A software company wants to create a home page for its website. The company wishes to design an ASP coded web page with the following specifications:

- To display a welcome message to the user using his name entered into the text box using Form Collection.
- To display the current date.
- To display the name of the browser that the user is using.

### Nibble Software

**Enter Your Name:** Manolina

**Welcome Manolina**

**Today's Date is:** 10/23/2006

**Browser Used:** Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)

6. Questions given below are based on VBScript:

(a) Differentiate between Local and Global scope of a variable in VbScript. 2

(b) Change the following script using DO.. WHILE loop without effecting the Output:

```vbscript
<Script Language="VBScript">
    DIM TOTAL, COUNT
</Script>
```
TOTAL = 0
COUNT =10
DO
Response. Write (COUNT & "<BR>")
COUNT = COUNT - 2
TOTAL = TOTAL + COUNT
LOOP UNTIL COUNT<1
Response. Write (TOTAL)
</Script>

(c) Give the output of the following code segment:
<Script Language = "VBScript">
Name = "Web Tech"
startword = true
For i = 1 to Len (Name)
   if (startword) Then
      Document.Write (Mid (Name, i, 1) )
      if   (Mid (Name, i, 1) "= " ") Then
         startword = false
      else
         startWord = true
      End if
   End If
Next
</Script>

(d) Write the HTML code for creating the form given below and also write the embedded VBScript code for the click event of the “Calculate Cost” button, should call a function “calculate()” which will calculate the total cost of the items bought and displays it in an message box. For example if the user selects T-Shirt as the item and enters the number of items as 2 then the total cost will be Rs. 600.
Questions given below are based on the unit Web Technologies:

(a) What is a Modem? 1
(b) Differentiate between Star and Bus Topology. 2
(c) Explain the following terms:
   (i) Linux
   (ii) OSS
   (iii) Postgres
   3
(d) Sunrise Enterprises is a big organisation and has 5 wings where it runs its operations (shown below): 4
The distances between the different wings are given below:

<table>
<thead>
<tr>
<th>Distance</th>
<th>Distance in mts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 1 and 2</td>
<td>40 mts.</td>
</tr>
<tr>
<td>Between 2 and 3</td>
<td>40 mts.</td>
</tr>
<tr>
<td>Between 1 and 3</td>
<td>55 mts.</td>
</tr>
<tr>
<td>Between 2 and 5</td>
<td>130 mts.</td>
</tr>
<tr>
<td>Between 4 and 5</td>
<td>95 mts.</td>
</tr>
</tbody>
</table>

Each wing contains the following number of computers:

<table>
<thead>
<tr>
<th>Wing</th>
<th>No. of Computers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
</tr>
</tbody>
</table>

Answer the following questions based on the above given information:
(i) Suggest suitable cable layout(s) for connecting the wings.
(ii) Where do you think the server should be placed and explain why?
(iii) Suggest the type of cable mat should be used if the organization wants the most economical option.
(iv) Where and why should repeaters be used?