Q.2 a. How do we create frames in HTML? What is a frameset?

Answer:
Frames allow an author to divide a browser window into multiple (rectangular) regions. Multiple documents can be displayed in a single window, each within its own frame. Graphical browsers allow these frames to be scrolled independently of each other, and links can update the document displayed in one frame without affecting the others. You can't just "add frames" to an existing document. Rather, you must create a frameset document that defines a particular combination of frames, and then display your content documents inside those frames. The frameset document should also include alternative non-framed content in a NOFRAMES element.
The HTML 4 frames model has significant design flaws that cause usability problems for web users. Frames should be used only with great care.

b. Why doesn't <TABLE WIDTH="100%"> use the full browser width?

Answer:
Graphical browsers leave a narrow margin between the edge of the display area and the content. Also note that Navigator always leaves room for a scrollbar on the right, but draws the scrollbar only when the document is long enough to require scrolling. If the document does not require scrolling, then this leaves a right "margin" that cannot be removed

Q.3 a. What are the advantages and disadvantages of various style specification methods?

Answer:

External Style Sheets

Advantages

- Can control styles for multiple documents at once
- Classes can be created for use on multiple HTML element types in many documents
- Selector and grouping methods can be used to apply styles under complex contexts

Disadvantages

- An extra download is required to import style information for each document
- The rendering of the document may be delayed until the external style sheet is loaded
- Becomes slightly unwieldy for small quantities of style definitions

Embedded Style Sheets

Advantages

- Classes can be created for use on multiple tag types in the document
- Selector and grouping methods can be used to apply styles under complex contexts
- No additional downloads necessary to receive style information

Disadvantages

- This method cannot control styles for multiple documents at once

Inline Styles

Advantages

- Useful for small quantities of style definitions
- Can override other style specification methods at the local level so only exceptions need to be listed in conjunction with other style methods

Disadvantages

- Does not distance style information from content (a main goal of SGML/HTML)
- Cannot control styles for multiple documents at once
- Author cannot create or control classes of elements to control multiple element types within the document

Selector grouping methods cannot be used to create complex element addressing scenarios

b. What does the "cascading" in "cascading style sheets" mean?

Answer:
Style Sheets allow style information to be specified from many locations. Multiple (partial) external style sheets can be referenced to reduce redundancy, and both authors as well as readers can specify style preferences. In addition, three main methods can be employed by an author to add style information to HTML documents, and multiple approaches for style control are available in each of these methods. In the end, style can be specified for a single element using any, or all, of these methods. What style is to be used when there is a direct conflict between style specifications for an element?

Cascading comes to the rescue. A document can have styles specified using all of these methods, but all the information will be reduced to a single, cohesive "virtual" Style Sheet. Conflict resolution is based on each style rule having an assigned weight according

to its importance in the scheme of things. A rule with a higher overall importance will carry a higher weight. This will be used in place of a competing style rule with a lower weight/importance. A hierarchy of competing styles is thus formed creating a "cascade" of styles according to their assigned weights. The algorithm used to determine this cascading weight scale is fairly complex.
For more information, see the section on cascading in the **CSS1 Specification** or the **Index DOT Css** section on the Style Sheet **Cascade** process.

Q.4 a. How JavaScript make a web site dynamic? Also write what are the problems with Java Script

Answer: Page Number 143 of Text Book

b. What is the difference between Client side JavaScript and Server side Java Script?

Answer:
Client side java script comprises the basic language and predefined objects which are relevant to running java script in a browser. The client side java script is embedded directly by in the HTML pages. This script is interpreted by the browser at run time.

Server side java script also resembles like client side java script. It has relevant java script which is to run in a server. The server side java scripts are deployed only after compilation

Q.5 a. Write a Java Script code that asks for name and age. Include a function called Validate(). If the data is valid only then the contents of the form are transmitted in email message.

Answer: Page Number 239 of Text Book

b. How can JavaScript make a Web site easier to use?

Answer:
JavaScript's greatest potential gift to a Web site is that scripts can make the page more immediately interactive, that is, interactive without having to submit every little thing to the server for a server program to re-render the page and send it back to the client. For example, consider a top-level navigation panel that has, say, six primary image map links into subsections of the Web site. With only a little bit of scripting, each map area can be instructed to pop up a more detailed list of links to the contents within a subsection whenever the user rolls the cursor atop a map area. With the help of that popup list of links, the user with a scriptable browser can bypass one intermediate menu page. The user without a scriptable browser (or who has disabled JavaScript) will have to drill down through a more traditional and time-consuming path to the desired content.

Q.6 a. What are scalar data and scalar variable? Explain with suitable examples.

Answer:
Perl has a flexible concept of data types. Scalar means a single thing, like a number or string. So the Java concept of int, float, double and string equals to Perl's scalar in concept and the numbers and strings are exchangeable. Scalar variable is a Perl variable that is used to store scalar data. It uses a dollar sign $ and followed by one or more aphanumeric characters or underscores. It is case sensitive.

b. Write a script to reverse a string without using Perls built in functions.

Answer:

```
my $i;

my $str="hello";

my @str=split('',$str);


for($i=$#str;$i>=0;$i--)
{

    print $str[$i];

}
```

Q7 a. What is CGI? When we need to use CGI?

Answer:
The Common Gateway Interface, or CGI, is a standard for external gateway programs to interface with information servers such as HTTP servers.
A plain HTML document that the Web daemon retrieves is static, which means it exists in a constant state: a text file that doesn't change.
A CGI program, on the other hand, is executed in real-time, so that it can output dynamic information.

There are innumerable caveats to this answer, but basically any Webpage containing a form will require a CGI script or program to process the form inputs.

b. With the help of suitable figure explain Perl DBI.

Answer: Page Number 380 of Text Book

Q8. a. What is PHP? What are the reasons for the popularity of PHP?

Answer: Page Number 422 of Text Book

b. How to set cookies in PHP? Write a code that reads and displays a cookie and sets if with a new value that is passed as a parameter to the script.

Answer: Page Number 477 of Text Book

Q9 a. List any three benefits of Extensible Style sheet (XSL) mechanism. Explain any five elements of XSL.

Answer: Page Number 535 & 542 of Text Book

b. Give the basic structure of XML document and explain it. Explain the Difference between internal and external entities.

Answer: Page Number 514, 528 of Text Book

Text Book

Web Programming – Building Internet Applications, Chris Bates, 3rd Edition, Wiley Student Edition, 2006