QUESTIONS AND ANSWERS ON XML

Q.1 What is XML?
Ans. XML is the Extensible Markup Language. It improves the functionality of the web by letting you identify your information in a more accurate, flexible and adaptable way. It is extensible because it is not a fixed format like HTML. Instead, XML is actually a Meta language—a language for describing other languages, which lets you design your own markup languages for limitless different types of documents. XML can do this because it’s written in SGML, the international standard Meta language for text document markup.

Q.2 What is markup language?
Ans. A markup language is a set of words and symbols for describing the identity of pieces of a document (for example ‘this is a paragraph’, ‘this is heading’ etc.). Programs can use this with a style sheet to create output for screen, print, audio, video, braille etc. Some markup languages only describe appearances but this method can only be used for display, and is not normally reusable for anything else.

Q.3 Where should I use XML?
Ans. Its goal is to enable generic SGML to be served, received and processed on the Web in the way that is now possible with HTML. XML has been designed for ease of implementation and for interoperability with both SGML and HTML.

Q.4 Where is XML such an important development?
Ans. It removes two constraints which were holding back web developments:
   a) Dependence on a single, inflexible document type (HTML) which was being much abused for tasks it was never designed for.
   b) The complexity of full SGML, whose syntax allows many powerful but hard to program options. XML allows the flexible development of user-defined document types.

Q.5 Describe the differences between XML and HTML.
Ans. It’s amazing how many developers claim to be proficient programming with XML, yet do not understand the basic difference between XML and HTML. Anyone with a fundamental grasp of XML should be able describe of the main differences outlined in the table below.

<table>
<thead>
<tr>
<th>XML</th>
<th>HTML</th>
</tr>
</thead>
<tbody>
<tr>
<td>user definable tags</td>
<td>defined set of tags designed for web display</td>
</tr>
<tr>
<td>Content Driven</td>
<td>Format Driven</td>
</tr>
<tr>
<td>End tags required for well-formed documents</td>
<td>End tags not required</td>
</tr>
<tr>
<td>Quotes required around</td>
<td>Quotes not required</td>
</tr>
<tr>
<td>Slash required in empty tags</td>
<td>Slash not required</td>
</tr>
</tbody>
</table>
Q.6 Who is responsible for XML?

Ans. XML is a project of the World Wide Web Construction (W3C), and the development of the specification is supervised by an XML working Group. A Special Interest Group of co-opted contributors and experts from various fields contributed comments and reviews by email. XML is a public format: it is not a proprietary development of any company, although the membership of the WG and the SIG represented companies as well as research and academic institutions. The v1.0 specification was accepted by the W3C as a Recommendation on Feb 10, 1998.

Q.7 Does XML replaces HTML?

Ans. No, XML itself does not replace HTML. Instead, it provides an alternative which allows you to define your own set of markup elements. HTML is expected to remain in common use for some time to come, and the current version of HTML is in XML syntax. XML is designed to make the writing of DTDs much simpler than with full SGML.

Q.8 Why not just carries on extending HTML?

Ans. HTML was already overburdened with dozens of interesting but incompatible inventions from different manufacturers, because it provides only one way of describing your information.

Q.9 What is DOM and how does it relate to XML?

Ans. The document Object Model (DOM) is an interface specification maintained by the W3C DOM work group that defines an application independent mechanism to access, parse or update XML data. In simple terms it is hierarchical model that allows developer that has worked extensively with XML should be able to discuss the concept and use of DOM objects freely.

Q.10 What is SOAP and how does it relates to XML?

Ans. The Simple Object Access Protocol (SOAP) uses XML to define a protocol for the exchange of information in distributed computing environments. SOAP consists of three components an envelope, a set of encoding rules and a convention for representing remote procedure calls.