**1. What is a markup language?**

Markup languages are designed for presentation of text in different formats, and it can also be used for transporting and storing data. This markup language specifies the code for formatting, layout and style of data .This markup code is called Tag.

HTML and XML are examples of Markup Language.

**2. What is XML?**

XML is called Extensible Markup Language which is designed to carry or transport and store data. XML tags are not as predefined as HTML, but we can define our own user tags for simplicity. It mainly concentrates on storing of data, not on displaying of data.

**3. What are the features of XML?**

Main features of XML are:

• Very easy to learn and implement

• XML files are text files, and no editor is required

• Minimal and a limited number of syntax rules in XML

• It is extensible, and it specifies that structural rules of tags

**4. What are the differences between HTML and XML?**

Following are the differences between HTML and XML:

|  |  |
| --- | --- |
| **HTML** | **XML** |
| Markup language used to display data | Markup language used to store data |
| Case Insensitive | Case sensitive |
| Designing web pages | Used to transport and store data |
| Predefined Tags | Custom Tags |
| Does not Preserve white spaces | Preserve white spaces |
| Static | Dynamic |

**5. Which tag is used to find the version of XML and the syntax?**

Declaring the XML version is very important for each XML document and platform needs to be specified in which it is running.

**6. What is XML DOM Document?**

XML Document object represents the whole XML document, and it is the root of a document tree. It gives access to entire XML document – Nodes and Elements, and it has its own properties.

**7. What is XPath?**

XPath is used to find information in an XML document and contains standard functions. XPath is the major element in XSLT, and it is w3c recommendation.

**8. What is an attribute?**

An attribute provides more or additional information about an element than otherwise.

|  |  |
| --- | --- |
| 1 | <Person name=”Peter”> |

Attribute name can be given to an element person.

**9. Can we have empty XML tags?**

Yes, we can have empty tags in XML. Empty tags are used to indicate elements that have no textual content. Empty tags can be represented as

|  |  |
| --- | --- |
| 1  2  3 | <person></person>     <person/> |

**10. What are the advantages of XML DOM Document?**

Advantages of XML DOM:

• XML structure is traversable, and it can be randomly accessed by traversing the tree.

• XML structure is modifiable, and values can be added, changed and removed

**11. What are the basic rules while writing XML?**

These are the basic rules while writing XML:

• All XML should have a root element

• All tags should be closed

• XML tags are case sensitive

• All tags should be nested properly

• Tag names cannot contain spaces

• Attribute value should appear within quotes

• White space is preserved

**12. What is XML Element?**

An XML document contains XML Elements, and it starts from an element’s start tag to end tag. It can contain:

• Other elements within main element

• An Attribute

• text

**13. What is CDATA?**

CDATA is unparsed character data that cannot be parsed by the XML parser. Character < and > are illegal in XML elements. CDATA section starts with <![CDATA[“ and end with “]]>”.

**14. How comment can be represented in XML?**

Comment can be represented as <!- – comments – -> as like HTML. This comment symbol is applicable for single or multiple lines.

**15. What are XML Namespaces?**

XML namespaces are used to avoid element name conflicts, and it can be avoided by using prefix before the name.

**16. What is XML Parser?**

XML Parser is used to convert from XML document into an XML DOM object which can be written in Javascript.

**17. What is XSL?**

XSL is a language used with XML for expressing style sheets as like CSS. It describes how to display an XML document for a given type.

**18. Who is responsible for XML?**

XML is a recommendation of the W3C – World Wide Web Consortium and the development are supervised by XML working group.

**19. What is an XML Schema?**

An XML schema gives the definition of an XML document, and it has following:

• Elements and attributes

• Elements that are child elements

• Order of child elements

• Data types of elements and attributes

**20. What is well formed XML document?**

A well-formed XML document must follow the following rules  –

• Every start tag should end with an end tag

• XML tags are case sensitive

• Empty tags are necessary to close with a forward slash

• All tags should be properly nested

**21. Why XML has been used for development?**

XML is used for development for following reasons:

• Used for Database driven websites

• Used to store data for e-commerce websites

• Used to transport and store data on internet

• XML is used for database and flat files

• Generate dynamic content by applying different style sheets

**22. What is SGML?**

SGML is large and powerful Standard Generalized markup Language which is used to define descriptions of the structure of different types of electronic document.

**23. Can I execute a XML?**

No, we cannot execute XML, and it is not a programming language to execute. It is just a markup language to represent the data.

**24. What are the special characters used in XML?**

<, > and & are the special characters used in XML. Because these characters are used for making tags.

**25. What software is available for XML?**

There are thousands of programs available for XML and updated list will be present in http://xml.coverpages.org.

**26. Whether graphics can be used in XML? If so, How?**

Yes, Graphics can be included in XML by using XLink and XPointer specifications. It supports graphic file formats like GIF, JPG, TIFF, PNG, CGM, EPS and SVG.

**27. Can I replace HTML with XML?**

No, XML is not a replacement of HTML. XML provides an alternative approach to define own set of markup elements, and it is used for processing and storing data.

**28. What are the benefits of XML?**

Benefits of XML are

**Simplicity:** Very easy to read and understand the information coded in XML.

**Openness:** It is a W3C standard, endorsed by software industry market leaders.

**Extensibility:** It is extensible because it has no fixed set of tags. You can define them as you need.

**Self-descriptive:** XML documents do not need special schema set-up like traditional databases to store data. XML documents can be stored without such definitions, because they contain metadata in the form of tags and attributes.

**Scalable:** XML is not in binary format so you can create and edit files with anything and it is also easy to debug.

**Fast access:** XML documents are arranged in hierarchical form so it is comparatively faster.

• Simple to read and understand

• XML can be done with a text editor

• Extensibility – No fixed tags

• Self – descriptive

• Can embed multiple data types

**29) What are the different XML API's?**

**Tree-based API:** It compiles an XML document in a tree like structure and loads it into the memory. You can traverse and change the tree structure. Tree based API's are useful for a wide range of applications. Example of tree-based API is DOM parser.

**Event-based API:** An event based API provides the reports to an application about the parsing event. It uses a set of built-in call back functions. Example of event-based API is SAX parser.

**30. What are the disadvantages of XML?**

Following are the disadvantages of XML:

• XML will be just a text file if elements and attributes are not defined properly.

• Overlapping markup is not permitted

**31. What is DTD?**

DTD is abbreviated as Document Type Definition and it is defined to build legal building blocks of an XML document. It defines the XML document structure with elements and attributes.

**32. Why XSLT is important for XML?**

XSLT is abbreviated as eXtensible Sytlesheet Language Transformation which is used to transform an XML document to HTML before it is displayed to the browser.

**33. What are nested elements in XML?**

If one or more elements are nested inside the root element is called nested element. Nesting can be easy to understand and also keeps order in an XML document.

**34. What is XQuery?**

XQuery was designed to query XML data which is nothing but SQL for database tables. XQuery is used to fetch the data from the XML file.

**35. What is XLink and XPointer?**

XLink is the standard way of creating hyperlinks in the XML files. Xpointer which allows those hyperlinks to point to more specific parts of the XML file or document.

**36. Why XML editor is needed instead of Notepad?**

XML editors are required to write error free XML documents, and it is used to validate against DTD or schema. Editors are able to check:

• Open and Close Tags

• XML against DTD

• XML against Schema

• Color code on XML Syntax

**37. What is XML Encoding?**

XML documents may contain Non-ASCII characters like French and Norwegian characters. XML Encoding is used to avoid errors and XML files have to be saved as Unicode.

**38. Which XML is set to be valid XML?**

When the XML file is validated against the Document Type Definition(DTD), then it is called valid XML. DTD is nothing but it defines the structure of an XML file.

**39. What is Simple Element?**

A simple element contain only text and following are the kinds of Simple Element:

* No attributes
* Doesn’t contain other elements
* It cannot be empty

**40. What is Complex Element?**

A complex element contain other elements or attributes and following are kinds of Complex Elements:

* It has empty elements
* It contain other elements
* It contain only text
* It contain both other elements and text

**41. Is there a way to describe XML data?**

Yes, XML uses Document Type Definition (DTD) to describe the data.

**42. What are the three parts of XSL?**

XSL consists of three parts:

* XSLT – Used to transform XML documents
* XPath – Used for navigating in XML documents
* XSL-FO – Used for formatting XML documents

**43. What are the types of XML Parsers?**

There are two types of parsers – Non-Validating and Validating Parsers. Name itself implies Non-Validating will not validate the XML and Validating parser will validate the XML with DTD.

**44. Whether root element is required for XML? If so, how many root elements are required?**

Yes, root element is required, and it can have only one root element in each XML.

**45. What is XML Signature?**

XML Signature is recommended by W3C, and it acts as a digital signature for XML documents. If the signature is contained outside the document, it is called detached signature. If it contains inside the XML document, then it is called Enveloping signature.

**46. What is Data Island?**

An XML Data island is XML data embedded into a HTML page. This works only with the Internet.

**47. What is DiffGram in XML?**

A DiffGram is an XML format which is used to find current and original versions of XML document.

**48. What is SAX?**

SAX is an interface processing XML documents using events.

49**. What is XML DOM?**

**DOM** stands for *Document Object Model* which is used to describe the logical structure of XML document. It is a hierarchical model that provides a way to access and manipulate an XML document.

DOM methods and objects can be used with any languages like C#, VB, JavaScript and VB Script.

**50. What does XML stands for?**

XML stands for Extensible Markup Language.

**51. What is XML used for?**

**Answer:** XML is a tool that is used to store and transfer data.

**52. Is XML format or content-driven?**

**Answer:** XML is content-driven.

**53. Does XML support user-defined tags?**

**Answer:** Yes, the users can create their own tags in XML.

**54. What is XML declaration tag?**

**Answer:** <? XML version = “1.0” encoding = “UFT-8”? >

**55. Can XML be used for multimedia purpose?**

**Answer:** Yes, XML can be used for multimedia purposes by using SVG and SMIL.

**56. What does SVG stand for and what is it used for?**

**Answer:** SVG stands for Scalable Vector Graphics. It is an XML language that is used to display animations, images, graphics, and 2D from the XML code. Vector mathematical formulas are used here to render the content.

**57. What does SMIL stand for and what is it used for?**

**Answer:** SMIL stands for Synchronized Multimedia Integration Language. It is an XML language that is used to integrate images, text, and other media for a presentation.

**58. What importance does XSLT hold in XML?**

**Answer:** XSLT stands for Extensible Style sheet Language Transformation. It is used to transform an XML document to HTML before it is displayed to any browser.

**59. What is XQuery?**

**Answer:** XQuery is used to fetch data from the XML file, which is the SQL database.

**60. What is Xlink in XML?**

**Answer:** Xlink used in XML files, are the standard way of creating hyperlinks in XML files.

**61. What is Xpointer in XML?**

**Answer:** Xpointer in XML allows hyperlinks to point to more specific parts of the XML documents or files.

**62. What is XML signature/encryption?**

**Answer:** It defines the processing rules and syntax for encrypting and creating digital signatures on XML.

**63. What is DTD in XML?**

**Answer:** DTD stands for Document Type Definition, which describes a document written in XML. XML declaration syntax is defined in DTD. Naming convention rules of different types of elements are also defined in DTD.

**64. What is DOM? What is it used for?**

**Answer:** DOM stands for the Document Object Model. It is an API, Application Programming Interface that allows navigation through objects. Documents are treated as objects. DOM documents are generated by the user or created by a parser.

**65. What is the main disadvantage of DOM?**

**Answer:** The main disadvantage is that a large portion of memory is consumed by DOM.

**66. What does SOAP stand for?**

**Answer:** SOAP is a Simple Object Access Protocol.

**67. What is the relation of SOAP with XML?**

**Answer:** SOAP uses XML to define a protocol for the exchange of information in distributed computing environments.

**68. What are the three components in SOAP?**

**Answer:** It consists of an envelope, a set of encoding rules, and a convention for representing remote procedure calls.

**69. What is XML parser function?**

**Answer:** It is used to convert an XML file or document into the XML DOM object which is usually written in JavaScript.

**70. What is an XML schema?**

**Answer:** XML schema provides definition of an XML document.

**It comprises of:**

* Attributes and elements.
* Child elements.
* The data type of elements.
* Order of elements and attributes.

**71. What is the usage of XML in development?**

**Answer: XML has multiple usages as shown below:**

* XML is used for flat files and databases.
* It is used to store data and transport data on the Internet.
* It can generate different dynamic data using style sheets.
* XML is used to develop database-driven websites.
* It is used to store data for eCommerce websites.

**72. What do XML editors check?**

**Answer: The XML editors check are as follows:**

* XML against schema
* XML Syntax color code
* XML against DTD
* XML standard open and close tags

**73. What is Diffgram in XML?**

**Answer:** Diffgram is an XML format that is used to find the current and original versions of the XML document.

**74. What is XML Parser?**

**Answer:** XML parser is a piece of software, which checks for a well-defined format and performs validation of document. It also allows us to read, create, and modify an existing XML document.

**75. How to connect XML with the database?**

**Answer:** XML import and export modules are used to connect XML applications with databases. There has to be a 1:1 match between the field name of element type and the database table in DTD or XML schema. While in some cases little programming is required to establish the desired match.

**76. How to run an XML file?**

**Answer:** XML is not a programming language. It cannot be run or executed. It can be viewed or displayed on the browser or using the XML editor.

**77. Describe XPath.**

**Answer: XPath can be described as follows:**

1. XPath is a W3C recommendation.
2. It is the syntax for defining parts of an XML document.
3. It uses path expressions to navigate in the XML documents.
4. XPath contains a standard function library.
5. XPath is a major element of the XSLT standard.
6. It is used to navigate through attributes and elements in an XML document.

**78. Provide an example of XML.**

**Answer:**

|  |
| --- |
| <? XML version=”1.0” encoding = “UTF-8”?>  <FurnitureStore>  <Furniture category=”Table”>  <Title lang=”en”> Sale for today</Title>  <Type> Laptop table</Type>  <Year>2008</Year>  <Price>500</Price>  </FurnitureStore> |

**79. What are well-formed XML documents?**

**Answer: Well-formed XML documents have the following features:**

1. An XML document must have a root element.
2. XML tags are case sensitive.
3. XML elements should be properly nested.
4. XML values should be properly quoted.
5. XML tags should be closed properly.

**80. What are XML attributes? Explain with an example.**

**Answer:** XML attribute values should always be quoted. Single or double quotes can be used in XML.

**For example:**

* <Person degree = “PHD”>
* <Person name = ‘Jacob’>

**81. Write a code for XML attribute and element.**

**Answer:**

|  |
| --- |
| <Person location = “India”>  <Statename>Maharashtra</Statename>  <Cityname>Mumbai</Cityname>  </Person>       <Person>       <Location> India </Location>       <Statename>Maharashtra</Statename>       <Cityname>Mumbai</Cityname>       </Person> |

In the first element, location is an attribute. In last, location is an element. The user can choose the attribute or element.

**82. Can XML files be viewed in browsers?**

**Answer:** Yes, the XML file can be viewed in all known browsers. They are not displayed as HTML pages.

**83. What is XML Httprequest? What are its advantages?**

**Answer:** All modern browsers have a built-in XML Httprequest object to request for data from a server.

**Its advantages are as follows:**

* Updating a web page without reloading the page.
* Request data from a server
* Receive data from a server after the page has been loaded.
* Send data to a server in the background.

**84. Example of HttpRequest.**

**Answer:**

|  |
| --- |
| var xhttp= newXML Httprequest();  Xhttp.onreadystatechange=function();  { If this.readystate==4&& this.status==200)          { Action to be performed when document is ready;  Document.getelementbyID(“Demo”)  Innerhtml=xhttp.responseText;}}; |

**85. What is XML element?**

**Answer:** The XML element contains start tag, end tag, and values.

**For Example:**

* <City> Pune </City>
* <Price> 400.00 </Price>

XML element with no value is said to be empty like <element> </element>

**86. What are XML naming rules?**

**Answer: Naming rules are:**

* Element names must start with a letter or underscore.
* Element names are case sensitive.
* Element names cannot start with the letters XML.
* Element names can contain letters, digits, hyphens, underscore, and periods.
* Element names cannot contain spaces.

**87. What is SAX in XML?**

**Answer:** SAX stands for Simple API for XML. It is a sequential access parser.

It provides a mechanism of reading data from an XML document. It is said to be an alternative to DOM. DOM operates on the documents as a whole, SAX parsers operate on each piece of the XML document sequentially.

SAX consumes less memory. It cannot be used to write an XML document.

**88. What is XSNL?**

**Answer:** XSNL stands for XML Search Neutral Language. This language acts between the meta-search interface and the targeted system.

**89. What is the difference between a simple element and a complex element?**

**Answer:** Simple elements cannot be left empty. It contains fewer attributes, child elements, etc. Simple elements are text-based elements. Complex elements can contain sub-elements, empty elements, etc. The complex element can hold multiple attributes and elements.

#### 90. How XML is different from HTML?

**Answer:**  
Below is the point that explains the difference between XML and HTML:  
•XML is a software and hardware independent tool used to transport and store data while HTML is used to display data and focuses on how data looks  
•XML is for data representation while HTML is for displaying purpose  
•XML supports user-defined tags while HTML provides pre-defined tags  
•XML is a case-sensitive language while HTML language is not case-sensitive  
•In XML, you make up your own tags while HTML uses a fixed, unchangeable set of tags  
•In XML, all tags must be closed while in HTML, it is not necessary to close each tag  
•XML provides a framework to define markup languages while HTML is a markup language itself  
•XML is content-driven while HTML is format drive

#### 91. What are the basic rules while writing XML?

**Answer:** The basic rules while writing XML:  
•XML should have a root element  
•XML tags should be closed  
•XML tags are case sensitive  
•XML tags should be nested properly  
•Tag names cannot contain spaces  
•Attribute value should appear within quotes  
•White space is preserved in XML

#### 92. What is an XML Schema?

**Answer:**  
An XML schema gives the definition of an XML document and it has following:  
•Elements and attributes  
•Elements that are child elements  
•Order of child elements  
•Data types of elements and attributes

#### 93. Where is XML used? It is used to exchange information between two applications. Information can also be exchanged between two different applications that are running on a different server or the same server. It is used in Web Application, Mobile Application (IOS, Android, iPhone, window Phone) for providing the API. It is also used AS installer in a web application; you can set the application configuration in an XML file.

#### 94. In What case you are not going to use XML? XML is verbose and it can be 5-8 times larger in size compared to a CSV or a tab-delimited file. If your network has less bandwidth and your content is too large and your network throughput is vital to the application then you can consider tab or csv delimited format instead of XML.

**95. Why Is Xml Such An Important Development?**

It removes two constraints which were holding back Web developments:

1. dependence on a single, inflexible document type (HTML) which was being much abused for tasks it was never designed for;

2. 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. It provides a robust, nonproprietary, persistent, and verifiable file format for the storage and transmission of text and data both on and off the Web; and it removes the more complex options of SGML, making it easier to program for.

**96. Who Is Responsible For Xml?**

XML is a project of the World Wide Web Consortium (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.

**97. Give A Few Examples Of Types Of Applications That Can Benefit From Using Xml?**

There are literally thousands of applications that can benefit from XML technologies. The point of this question is not to have the candidate rattle off a laundry list of projects that they have worked on, but, rather, to allow the candidate to explain the rationale for choosing XML by citing a few real world examples. For instance, one appropriate answer is that XML allows content management systems to store documents independently of their format, which thereby reduces data redundancy. Another answer relates to B2B exchanges or supply chain management systems. In these instances, XML provides a mechanism for multiple companies to exchange data according to an agreed upon set of rules. A third common response involves wireless applications that require WML to render data on hand held devices.

**98. What Is Dom And How Does It Relate To Xml?**

The Document Object Model (DOM) is an interface specification maintained by the W3C DOM Workgroup that defines an application independent mechanism to access, parse, or update XML data. In simple terms it is a hierarchical model that allows developers to manipulate XML documents easily Any developer that has worked extensively with XML should be able to discuss the concept and use of DOM objects freely. Additionally, it is not unreasonable to expect advanced candidates to thoroughly understand its internal workings and be able to explain how DOM differs from an event-based interface like SAX.

**99. Why Should I Use Xml?**

Here are a few reasons for using XML .

\* XML can be used to describe and identify information accurately and unambiguously, in a way that computers can be programmed to ‘understand’ (well, at least manipulate as if they could understand).

\* XML allows documents which are all the same type to be created consistently and without structural errors, because it provides a standardised way of describing, controlling, or allowing/disallowing particular types of document structure. [Note that this has absolutely nothing whatever to do with formatting, appearance, or the actual text content of your documents, only the structure of them].

\* XML provides a robust and durable format for information storage and transmission. Robust because it is based on a proven standard, and can thus be tested and verified; durable because it uses plain-text file formats which will outlast proprietary binary ones.

\* XML provides a common syntax for messaging systems for the exchange of information between applications. Previously, each messaging system had its own format and all were different, which made inter-system messaging unnecessarily messy, complex, and expensive. If everyone uses the same syntax it makes writing these systems much faster and more reliable.

\* XML is free. Not just free of charge (free as in beer) but free of legal encumbrances (free as in speech). It doesn't belong to anyone, so it can't be hijacked or pirated. And you don't have to pay a fee to use it (you can of course choose to use commercial software to deal with it, for lots of good reasons, but you don't pay for XML itself).

\* XML information can be manipulated programmatically (under machine control), so XML documents can be pieced together from disparate sources, or taken apart and re-used in different ways. They can be converted into almost any other format with no loss of information.

\* XML lets you separate form from content. Your XML file contains your document information (text, data) and identifies its structure: your formatting and other processing needs are identified separately in a stylesheet or processing system. The two are combined at output time to apply the required formatting to the text or data identified by its structure (location, position, rank, order, or whatever).

**101. Using Xslt, How Would You Extract A Specific Attribute From An Element In An Xml Document?**

Successful candidates should recognize this as one of the most basic applications of XSLT. If they are not able to construct a reply similar to the example below, they should at least be able to identify the components necessary for this operation: xsl:template to match the appropriate XML element, xsl:value-of to select the attribute value, and the optional xsl:apply-templates to continue processing the document.

Extract Attributes from XML Data

Example 1.

<xsl:template match="element-name">

Attribute Value:

<xsl:value-of select="@attribute"/>

<xsl:apply-templates/>

</xsl:template>

**101. Do Xml Namespaces Apply To Entity Names, Notation Names, Or Processing Instruction Targets?**

No. XML namespaces apply only to element type and attribute names. Furthermore, in an XML documentthat conforms to the XML namespaces recommendation, entity names, notation names, and processing instruction targets must not contain colons.

**102. Can I Encode Mathematics Using Xml ?**

Yes, if the document type you use provides for math, and your users' browsers are capable of rendering it. The mathematics-using community has developed the MathML Recommendation at the W3C, which is a native XML application suitable for embedding in other DTDs and Schemas. It is also possible to make XML fragments from other DTDs, such as ISO 12083 Math, or OpenMath, or one of your own making. Browsers which display math embedded in SGML existed for many years (eg DynaText, Panorama, Multidoc Pro), and mainstream browsers are now rendering MathML. David Carlisle has produced a set of stylesheets for rendering MathML in browsers. It is also possible to use XSLT to convert XML math markup to LATEX for print (PDF) rendering, or to use XSL:FO. Please note that XML is not itself a programming language, so concepts such as arithmetic and if-statements (if-then-else logic) are not meaningful in XML documents.

**103. How Do I Get Xml Into Or Out Of A Database?**

Ask your database manufacturer: they all provide XML import and export modules to connect XML applications with databases. In some trivial cases there will be a 1:1 match between field names in the database table and element type names in the XML Schema or DTD, but in most cases some programming will be required to establish the desired match. This can usually be stored as a procedure so that subsequent uses are simply commands or calls with the relevant parameters. In less trivial, but still simple, cases, you could export by writing a report routine that formats the output as an XML document, and you could import by writing an XSLT transformation that formatted the XML data as a load file.

**104. What Is An Xml Namespace Prefix?**

An XML namespace prefix is a prefix used to specify that a local element type or attribute name is in a particular XML namespace

**105. What Software Is Needed To Process Xml Namespaces?**

From a document author’s perspective, this is generally not a relevant question. Most XML documents are written in a specific XML language and processed by an application that understands that language. If the language uses an XML namespace, then the application will already use that namespace — there is no need for any special XML namespace software.

**106. How Can I Declare Xml Namespaces So That All Elements And Attributes Are In Their Scope?**

XML namespace declarations that are made on the root element are in scope for all elements and attributes in the document. This means that an easy way to declare XML namespaces is to declare them only on the root element.

**107. What Is The Scope Of An Xml Namespace Declaration?**

The scope of an XML namespace declaration is that part of an XML document to which the declaration applies. An XML namespace declaration remains in scope for the element on which it is declared and all of its descendants, unless it is overridden or undeclared on one of those descendants.

**108. Explain About Soap?**

SOAP acts as a medium to provide basic messaging framework. On these basic messaging frameworks abstract layers are built. It transfers messages across the board in different protocols; it also acts as a

**109. How Do I Get Started With Web Services?**

The easiest way to get started with Web services is to learn XML-RPC. Check out the XML-RPC specification or read my book, Web Services Essentials. O'Reilly has also recently released a book on Programming Web Services with XML-RPC by Simon St.Laurent, Joe Johnston, and Edd Dumbill.

Once you have learned the basics of XML-RPC, move onto SOAP, WSDL, and UDDI. These topics are also covered in Web Services Essentials. For a comprehensive treatment of SOAP, check out O'Reilly's Programming Web Services with SOAP, by Doug Tidwell, James Snell, and Pavel Kulchenko.

**110. Give Examples Where Soap Is Used?**

Remote methods over multiple platforms and technologies are used with HTTP. SOAP is XML based protocol and platform-agnostic. Each application uses different technology. This may cause problems with proxy server and firewalls. SOAP is the solution for this situation.

Industries transport the request for finding best route and best cost price. So the application transfers a request to other similar services which uses SOAP.

**111. Explain Different Types Of Segment.**

There are four types of segments used in Oracle databases:

- data segments

- index segments

- rollback segments

- temporary segments

**112. What Is In Operator**?

IN operator in a query allows you to have multiple values in a WHERE clause.

**113. What Is Like Operator?**

LIKE in oracle enables the user to search for a string of the matching type. “%” is used as a wild card in the query.

**114. Define Is Null Operator.**

IS NULL operator is usually used to check if a columns value is NULL or not.

**115. Give A Few Examples Of Types Of Applications That Can Benefit From Using Xml.**

There are literally thousands of applications that can benefit from XML technologies. The point of this question is not to have the candidate rattle off a laundry list of projects that they have worked on, but, rather, to allow the candidate to explain the rationale for choosing XML by citing a few real world examples. For instance, one appropriate answer is that XML allows content management systems to store documents independently of their format, which thereby reduces data redundancy. Another answer relates to B2B exchanges or supply chain management systems. In these instances, XML provides a mechanism for multiple companies to exchange data according to an agreed upon set of rules. A third common response involves wireless applications that require WML to render data on hand held devices.

**116. Where Can I Declare An Xml Namespace?**

You can declare an XML namespace on any element in an XML document. The namespace is in scope for that element and all its descendants unless it is overridden.

**117. What Is The Difference Between Versions 1.0 And 1.1 Of The Xml Namspaces Recommendation?**

There are only two differences between XML namespaces 1.0 and XML namespaces 1.1:

\* Version 1.1 adds a way to undeclare prefixes. For more information,

\* Version 1.1 uses IRIs (Internationalized Resource Identifiers) instead of URIs. Basically, URIs are restricted to a subset of ASCII characters, while IRIs allow much broader use of Unicode characters.

**118. Difference between DTD and XML Schema?**

Answer : There are couple of differences between DTD and XML Schema e.g. DTD is not written using XML while XML schema are xml documents in itself, which means existing XML tools like [XML parsers](http://javarevisited.blogspot.sg/2011/12/parse-read-xml-file-java-sax-parser.html) can be used to work with XML schema. Also XML schema is designed after DTD and it offer more types to map different types of data in XML documents. On the other hand DTD stands for Document Type definition and was a legacy way to define structure of XML documents.

### 118. What is XML namespace? Why it's important?

Answer : XML namespace are similar to [package in Java](http://java67.blogspot.sg/2012/08/what-is-package-in-java-how-to-use.html) and used to provide a way to avoid conflict between two xml tags of same name but different sources. XML namespace is defined using xmlns attribute at top of the XML document and has following syntax  xmlns:prefix="URI". later that prefix is used along with actual tag in XML documents. Here is an example of using XML namespace :

**<root** xmlns:inst="http://instruments.com/inst"  
  **<inst:phone>**  
      **<inst:number>**837363223**</inst:number>**  
   **</inst:phone>**  
**</root>**

**119. What is SAX in XML?**

**SAX** stands for *Simple API for XML*. It is a sequential access parser. It is a simple API for XML which provides a mechanism for reading data from an XML document. It is an alternative of DOM. DOM operates on the documents as whole, SAX parsers operate on each piece of the XML document sequentially.

SAX has no formal specification like DOM and consumes less memory. But it can be used to read the XML document only not write.

**120. What is a valid XML document?**

A structurally correct element is called a valid XML document. It should follow some predefined rules of a specific type of document. These rules determine the type of data that each part of the document can contain. These rules can be written by the author of an XML document or someone other.

**121. What is DTD?**

**DTD** stands for *Document Type Definition*. It defines a leading building block of an XML document. It defines:

* Names of elements
* How and where they can be used
* Element attributes
* Proper nesting

**122. How can you apply a DTD to an XML document?**

To apply a DTD to an XML document, you can:

* Use the DTD element definition within the XML document itself.
* Provide a DTD as a separate file and reference its name in XML document.

**123. What is the difference between XML DTD and XML schema or XSD?**

XSL stands for Extensible Stylesheet Language. It is a language for expressing stylesheets. These stylesheets are like CSS which describes how to display an XML document of a given type.

* DTD stands for Document Type Definition whereas XSD stands for XML Schema Definition.
* DTD does not support namespaces. It has its own set of keywords to define a schema whereas XSD uses its own set of namespaces and elements to define the schema.
* DTD is the predecessor of XML schema whereas XML schema is a new technology, some XML parser do not support it yet.

**124. What is the difference between simple element and complex element?**

In XML, simple elements are text-based elements. It contains less attributes, child elements, and cannot be left empty.

But, complex elements can hold multiple attributes and elements. It can contain additional sub elements and empty element also.

**125. What is XML data binding? Why is it used?**

XML data binding is the process of representing the information in an XML document as an object in computer memory.

XML data binding is used to short your development effort, simplify maintenance, increase reliability. It saves your development time and money. It makes working with XML data very intuitive