



Petrozavodsk State University
Software engineering

XML questions

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Questions

XML

1. What does the XML abbreviation stand for?

- 1) Extensible Markup Language
- 2) Extraordinary Markup Language
- 3) Extended Markup Language

2. Which of the following characters should be escaped in XML?

- 1) < and >
- 2) & and "
- 3) / and -

3. Which XML component defines the document's structure?

- 1) Elements (tags)
- 2) Attributes
- 3) DTD (Document Type Definition)

4. What data types can be stored in XML attributes?

- 1) Text only
- 2) Numbers and dates
- 3) Images and audio files

5. Which of the following XML documents is valid?

- 1) <book><title>My Book</title></book>
- 2) <book><title>My Book</book></title>
- 3) <book><title></title></book>

DTD

1. What types of data can be described using DTD?

- 1) Text data only
- 2) Text data and numbers

3) Any data

2. What does the #REQUIRED attribute in DTD mean?

- 1) Attribute is required
- 2) Attribute is optional
- 3) Attribute has a default value

3. Which DTD element is used to define attributes?

- 1) ATTLIST
- 2) ELEMENT
- 3) ENTITY

4. What are the main roles of DTD in an XML document?

- 1) Defining the structure, describing data types, and validating
- 2) Creating a graphical user interface
- 3) Storing data

5. What does CDATA mean in DTD?

- 1) Character Data
- 2) Conditional Data
- 3) Content Data

XPath_XLink_XPointer

1. What is XLink in XML?

- 1) It's a query language for XML documents.
- 2) It's a specification for creating hyperlinks in XML documents.
- 3) It's a format for storing images in XML.

2. Which XML element is used for creating links with XLink?

- 1) <a>
- 2) <link>
- 3) <href>

3. What is the purpose of XPath in XML?

- 1) For creating links in XML documents.
- 2) For searching and navigating elements and attributes in XML documents.

3) For defining styles for XML elements.

4. What does the XPointer abbreviation mean in XML?

- 1) XML Pointer
- 2) XPath Pointer
- 3) Extended Pointer

5. How can XPointer be used in XML?

- 1) For determining the structure of an XML document.
- 2) For specifying exact positions within an XML document, including fragments and attributes.
- 3) For creating hyperlinks in XML documents.

XQuery

1. What does XQuery represent in the context of XML?

- 1) A query language for searching and processing XML data.
- 2) A markup language for marking up XML documents.
- 3) A programming language for creating web servers.
- 4) A database management system.
- 5) A data model for storing textual data.

2. What operations can be performed with XQuery?

- 1) Searching, filtering, and transforming XML data.
- 2) Creating animations and graphics in XML format.
- 3) Creating styles for XML documents.
- 4) Publishing documents on social networks.
- 5) Creating websites.

3. What types of data does XQuery support?

- 1) Numbers, strings, boolean values, and dates.
- 2) Numbers and strings only.
- 3) Boolean values and dates only.
- 4) Boolean values and numbers only.
- 5) All of the above options.

4. What functions can be used in XQuery?

- 1) Functions for working with dates and times, mathematical functions, string functions, and many more.
- 2) Mathematical functions only.
- 3) String functions only.
- 4) Functions for working with graphics and animations.
- 5) Functions for working with XML structures only.

5. What capabilities does XQuery provide for data filtering?

- 1) Sorting only.
- 2) Keyword-based search only.
- 3) Sorting, condition-based filtering, and data combination.
- 4) Aggregation of data only.
- 5) Regular expression-based search only.

XSL

1. What does XSL represent in the context of XML?

- 1) A query language for searching and processing XML data.
- 2) A language for describing the structure and transformation of XML documents.
- 3) A programming language for creating web servers.
- 4) A database management system.
- 5) A language for creating styles and formatting XML documents.

2. Which tool is typically used for transforming XML using XSLT?

- 1) XML Parser
- 2) XML Editor
- 3) XSL Transformer
- 4) XPath Query Engine
- 5) XML Generator

3. What are the main tasks that can be accomplished with XSLT?

- 1) Transforming and formatting XML data.

- 2) Creating a graphical interface for XML applications.
- 3) Executing SQL queries on databases.
- 4) Creating XML schemas and DTDs for XML document validation.
- 5) Working with multi-dimensional arrays in XML.

4. What types of output formats can be generated using XSLT?

- 1) Only HTML.
- 2) Only JSON.
- 3) HTML, XML, Text, JSON, and others.
- 4) Only XML.
- 5) Only PDF.

5. Which tools or languages are associated with XSLT for transforming and processing XML data?

- 1) XPath, XQuery, XPointer.
- 2) HTML, CSS, JavaScript.
- 3) Java, C#, Python.
- 4) SQL, NoSQL, MongoDB.
- 5) JSON, YAML, CSV.

XSL-FO

1. What does XSL-FO stand for in the context of XML?

- 1) Extensible Stylesheet Language for Formatting Objects
- 2) XML Styling Language
- 3) XSL Formatting Objects
- 4) XML Style Formatting
- 5) Extreme Styling and Formatting Language for Objects

2. What is the primary purpose of XSL-FO?

- 1) To define the presentation and layout of XML documents for printing or rendering.
- 2) To query and manipulate XML data.
- 3) To create web server applications.

- 4) To manage relational databases.
- 5) To define the structure of XML documents.

3. Which element in XSL-FO is used to define page layout and formatting?

- 1) fo:page-sequence
- 2) fo:layout-master-set
- 3) fo:block-container
- 4) fo:inline
- 5) fo:table

4. What is the role of an XSL-FO processor in rendering documents?

- 1) It converts XSL-FO documents into formatted output, such as PDF or printed pages.
- 2) It translates XML documents into XSL-FO documents.
- 3) It validates XML documents against DTDs and schemas.
- 4) It executes database queries.
- 5) It generates HTML documents from XML data.

5. What types of output formats can be generated from XSL-FO documents?

- 1) PDF, PostScript, HTML, and others.
- 2) Only HTML and XML.
- 3) Text and JSON.
- 4) Images and audio files.
- 5) Java, C#, Python.

Answers

XML

1. What does the XML abbreviation stand for? - **1**
2. Which of the following characters should be escaped in XML?
- **3**
3. Which XML component defines the document's structure? - **3**
4. What data types can be stored in XML attributes? - **1**
5. Which of the following XML documents is valid? - **1**

DTD

1. What types of data can be described using DTD? - **2**
2. What does the #REQUIRED attribute in DTD mean? - **1**
3. Which DTD element is used to define attributes? - **1**
4. What are the main roles of DTD in an XML document? - **1**
5. What does CDATA mean in DTD? - **1**

XPath_XLink_XPointer

1. What is XLink in XML? - **2**
2. Which XML element is used for creating links with XLink? - **1**
3. What is the purpose of XPath in XML? - **2**
4. What does the XPointer abbreviation mean in XML? - **2**
5. How can XPointer be used in XML? - **2**

XQuery

1. What does XQuery represent in the context of XML? - **1**
2. What operations can be performed with XQuery? - **1**
3. What types of data does XQuery support? - **1**
4. What functions can be used in XQuery? - **1**

5. What capabilities does XQuery provide for data filtering? - 3

XSL

1. What does XSL represent in the context of XML? - 2
2. Which tool is typically used for transforming XML using XSLT? - 3
3. What are the main tasks that can be accomplished with XSLT? - 1
4. What types of output formats can be generated using XSLT? - 3
5. Which tools or languages are associated with XSLT for transforming and processing XML data? - 1

XSL-FO

1. What does XSL-FO stand for in the context of XML? - 1
2. What is the primary purpose of XSL-FO? - 1
3. Which element in XSL-FO is used to define page layout and formatting? - 2
4. What is the role of an XSL-FO processor in rendering documents? - 1
5. What types of output formats can be generated from XSL-FO documents? - 1