

DESCRIPTION

SUTDENT'S NAME: sourabh kumar

PROGRAM: **Web design**

DATE: 18-09-2021

TEACHER'S NAME: suthakhar

COURSE: **Data Processing Technologies (TTD)**

TYPE OF EXAM: **Mid-term**

DURATION: **3 hours**

AUTHORIZED MATERIAL: **None**

OTHER INSTRUCTIONS FROM THE TEACHER

The exam has **XX5** pages including the cover page. In accordance with the syllabus, the evaluation is worth **XX20** % of the final grade.

Penalties imposed on a student accused of an attempt at plagiarism could include, but are not limited to, a grade of 0% for examination or for the entire course. The student could also be either put on probation, suspended and / or expelled from the program.

OTHER INFORMATION

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Revised by : **M.-J. Villeneuve**

Approved by : _____

Good luck !

Question 1

/3

What is XML used for?

Answer Extensible Markup Language (XML) is used to describe **data**. The XML standard is a flexible way to create information formats and electronically share structured data via the public Internet, as well as via corporate **networks**.

Question 2

/3

Using XML tags, write an example illustrating the XML structure.

Answer `<?xml version="1.0" encoding="UTF-8"?>`

```
<shiporder orderid="889923"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="shiporder.xsd">
<part number="1976">
  <name>Windscreen Wiper</name>
  <description>The Windscreen wiper
    automatically removes rain
    from your windscreen, if it
    should happen to splash there.
    It has a rubber <ref part="1977">blade</ref>
    which can be ordered separately
    if you need to replace it.
  </description>
</part>
```

/1

Question 3

What is an XML prolog?

Answer Extensible **markup language** (XML) **prolog** is the portion of every XML system that is present before the system's root element. This is the part of the XML system in which information about the XML programming is defined. There is no standard for XML prolog, but it will usually feature some of the same traits from one system to the next

Question 4

/3

Which of the following tags can't be used in a XML document? (Circle the letter corresponding to your answer)

- a) <xmlroot>(@)
- b) <myTag>
- c) <tag>
- d) <item15>
- e) None of the above.

Question 5

/5

It is sometimes possible to code elements in two different ways, transforming metadata in data. Re-code the following example to transform metadata in data.

```
<message date="2020-01-22">  
<to>Students</to>  
<from>Teacher</from>  
</message>
```



Question 6

/3

Briefly explain what is CDATA used for.

Answer A CDATA section contains text that will NOT be parsed by a parser. Tags inside a CDATA section will NOT be treated as markup and entities will not be expanded. The primary purpose is **for including material such as XML fragments, without needing to escape all the delimiters**

Question 7

/2 Briefly explain what is XSL language.

Answer XSL (eXtensible Stylesheet Language) is a styling language for XML.

XSLT stands for XSL Transformations.

This tutorial will teach you how to use XSLT to transform XML documents into other formats (like transforming XML into HTML).

Question 8

/3

Briefly explain what the following code lines would actually do.

```
<xsl:for-each select="bookstore/book">  
  <xsl:sort select="year"/>
```

Book will be sorted in years and will be printed on screen.

Question 9

/2

Just like it is mandatory when parsing external files, what is mandatory to parse XML using JavaScript (or jQuery)?

Answer

Type,
url,
dataType,
success.

/2

Question 10

Write what language has been used to code the following lines of codes.

/5

```
{  
  name : "John  
Smith",    age : "43",  
  city : "Montreal"  
}
```

Json pattern._____

Question 11

Based on the following lines of codes, complete the jQuery code so the DIV would show the result « John Smith is 43 ».

```
<div> </div>
```

```
<script>
```

```
let data = { "name" : "John Smith", "age" : "43", "city" : "Montreal" };
```

```
let result = JSON.parse(data);
```

/3

```
    $("div").append(result.name + " is " + result.age);  
</script>_____);
```

</script>

Question 12

Retrieving JSON data from an external file, using jQuery, what shorthand method could be used?

Answer

```
<div id="results"> </div>
<script language="JavaScript">
$.get('my_xml-02.xml', function(data) { // AJAX request shorthand
var i = 0;
$(data).find('bookstore').children('book').each(function(){
var sTitle = $(this).find('title').text();
var sAuthor = $(this).find('author').text();
var sYear = $(this).find('year').text();
var sPrice = $(this).find('price').text();
$("<p></p>").html("<b>" + sTitle + "</b>, " + sAuthor + ", " + sYear + ", " +
sPrice).appendTo("#results");
i++;
});
var sTotalBooks = i;
$("<p></p>").html("<b>Total of books:</b> " + sTotalBooks).prependTo("#results");
});
</script>
```

Question 13

/5

Based on the following JSON data, complete the code so the result showing in DIV would be «Jane Doe»

```
{
  users: [
    {
      one : "John Smith",
      two : "Jane Doe",
    }
  ]
}
```

```
<div> </div>
```

```
<script>
```

```
$.getJSON('myfile.json', function(data) {
```

```
let result = data.user.
```

```
    _____ ;
```

```
    $("div").append(result);
```

```
  }
```

```
</script>
```