

DESCRIPTION	
SUTDENT'S NAME:	manjit singh
PROGRAM:	Web design
DATE:	18-sep-2021
TEACHER'S NAME:	suthakar
COURSE:	Data Processing Technologies (TTD)
TYPE OF EXAM:	Mid-term
DURATION:	3 hours
AUTHORIZED MATERIAL:	None

OTHER INSTRUCTIONS FROM THE TEACHER
<p>The exam has XX5 pages including the cover page. In accordance with the syllabus, the evaluation is worth XX20 % of the final grade.</p> <p>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.</p>

OTHER INFORMATION

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Revised by : M.-J. Villeneuve

Approved by : _____

Good luck !

Question 1

/3

What is XML used for?

Answer XML provides a **standard method to access information**, making it easier for applications and devices of all kinds to use, store, transmit, and display data.

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="x.xsd">
  <orderperson>John Smith</orderperson>
  <shipto>
    <name>Ola Nordmann</name>
    <address>Langgt 23</address>
    <city>4000 Stavanger</city>
    <country>Norway</country>
  </shipto>
  <item>
    <title>Empire Burlesque</title>
    <note>Special Edition</note>
    <quantity>1</quantity>
    <price>10.90</price>
  </item>
```

```
<item>
  <title>Hide your heart</title>
  <quantity>1</quantity>
  <price>9.90</price>
</item>
</shiporder>
```

Question 3

What is an XML prolog?

Answer XML Prolog is **the component added in the beginning of an XML document**. Otherwise, we can say that whatever it appears before the document's root element can be considered as Prolog. XML Prolog includes XML declaration, DOCTYPE and comments, processing instructions too.

Question 4

/3

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

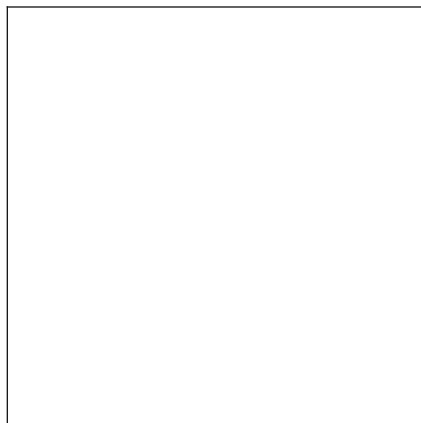
- a) <xmlroot>(●)
- b) <myTag>
- c) <tag>
- d) <item15>
- e) None of the above.

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>
```



Answer.

< note><date>2020-01-

22</date><to>Students</to><from>Teacher</from></note>

Question 6

/3

Briefly explain what is CDATA used for.

Answer Standing for Character Data, CDATA is defined as blocks of plain text which are not parsed and that would

otherwise be recognized as markup. When using CDATA, you are telling the parser a specific section of

the document contains no markup and has to be treated as plain text. This is especially useful for text containing symbols and special characters.

Question 7

/2 Briefly explain what is XSL language.

Answer XSL is a language for expressing style sheets. An XSL style sheet is, like with CSS, a file that describes how to display an XML document of a given type. XSL shares the functionality and is compatible with CSS2 (although it uses a different syntax). It also adds:

Question 8

/3

Briefly explain what the following code lines would actually do.

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

This will select books in bookstore and will sort from year to year.

Question 9

/2

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

Answer

```
$.ajax({  
  type: "GET",  
  url: "response-data-export.xml",  
  dataType: "xml",  
  success  
})
```

/2

Question 10

/5

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

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

This is json language.

Question 11

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

/3

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

```
<script>
```

```
let data = { "name" : "John Smith", "age" : "43", "city" : "Montreal" };  
let result = JSON.parse(data);
```

```
    $("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 id="result"> </div>
```

```
<script>
```

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

```
let result = data.users;
```

```
let i = "";
```

```
for (i=0; i < x.length; i++) {
```

```
  str += "<b>" + data.users[i].one + "</b>, " + data.book[i].two  ";
```

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

```
}
```

```
</script>
```