44-563 Developing Web Applications and Services Fall 2013

Exam 2 Version 3

Each question is worth 4 points.

1. jQuery is used for server-side programming.

A. True

B. False

2. Assume a web page contains this HTML:

<button id="hello">Greetings</button>

Write jQuery code to change the label on the button to "Goodbye".

$("#hello").html("Goodbye");

3. Assume a web page contains this HTML:

<p id="hi">This is a paragraph.</p>

Write jQuery code to hide this element.

$("#hi").hide();

4. Assume a web page contains this HTML:

<p id="hi">This is a paragraph.</p>

Write jQuery code to remove this element from the web page.

$("#hi").remove();

5. XML is part of Java and can only be parsed using Java.

A. True

B. False

6. XML uses namespaces to avoid

A. Extra white space in documents

B. Spelling errors in tag names

C. Naming collisions in documents

7. Each XML namespace has a unique URI that must always be used in all documents.

A. True

B. False

8. Assume we have defined an XML language using the DTD below.

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

<!ELEMENT a (b, c+, d\*)>

<!ELEMENT b (#PCDATA)>

<!ELEMENT c (#PCDATA)>

<!ELEMENT d (#PCDATA)>

The element d may be omitted.

A. True

B. False

9. Assume an XML schema contains this code:

<xs:sequence>

<xs:element name="s" type="xs:string" minOccurs="0"/>

</xs:sequence>

The element s can occur two times.

A. True

B. False

10. Assume an XML schema contains this code:

<xs:simpleType name="count">

<xs:restriction base="xs:positiveInteger">

<xs:maxExclusive value="6"/>

</xs:restriction>

</xs:simpleType>

The maximum legal value of an element of type count is

A. 0

B. 1

C. 5

D. 6

11. Assume an XML schema contains this code:

<xs:simpleType name="T">

<xs:restriction base="xs:string">

<xs:pattern value="[2-6]{2}(\d{3})?"/>

</xs:restriction>

</xs:simpleType>

Circle all of the values below that are legal values for an element of type T.

A. 463

B. 23456

C. 45678

D. 87654

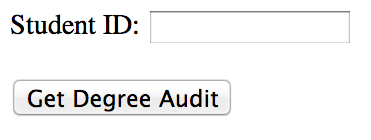
E. 765

12. Servlet code is executed

A. By a browser on the client side

B. By Glassfish on the server side

13. The web page shown below contains a form. When the button is clicked, the servlet degAudit handles the request.



The code for the form is shown below. Fill in the blanks to complete the code.

<form \_\_\_action\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_="degAudit>

Student ID:

<input type="text" \_\_\_\_name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_="studentId">

<br><br>

<input type="\_\_\_\_\_submit\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_" value="Get Degree Audit">

</form>

14. Write servlet code that assigns the value of the request parameter named studentID to the string variable sid.

String sid = request.getParameter("studentId");

15. The application server sends a session ID to the client using a

A. request parameter

B. submit parameter

C. cookie

16. Assume a web application has created an HttpSession object named session. Complete the code below to save a username "Leonard" so that it can be accessed thoughout the session.

session.setAttribute\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_("username", "Leonard");

17. In a web application that uses AJAX, suppose an AJAX request is initiated when the user clicks on a button. The <input> element that implements the button must be of type="submit".

A. True

B. False

18. The AJAX response has been received from the server when request.readyState == \_\_\_4\_\_\_\_\_\_\_ and request.status == \_\_200\_\_\_\_\_\_\_\_.

19. When an AJAX response is received on the client side, it is handled by a JavaScript function called the \_\_\_\_\_callback\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ function.

20. In AJAX, the request object is of type

A. Request

B. HttpRequest

C. XMLHttpRequest

21. Assume we are returning an AJAX response that is written in JSON. In the servlet, we set the response type as follows (fill in the blank):

response.setContentType("application/json\_\_\_\_\_\_\_\_\_\_\_;charset=UTF-8");

22. The following jQuery code initiates an AJAX request.

$.get("hello", goodbye);

In this code, "hello" is

A. a request parameter

B. the URL of a servlet

C. the callback function

23. Consider the following JavaScript code:

var book = { "title": "Cryptonomicon", "author": "Stephenson" };

Complete the following statement that assigns the title of the book to the variable bookTitle. Do NOT use the string "Cryptonomicon" in your answer.

var bookTitle = book.title;

24. Suppose we use the jQuery function $.each() to iterate over an array. The current item in the array is referred to using the name

A. index

B. this

C. element

25. Assume the Java variable gen of type JsonGenerator. To finish writing a JSON object, we call gen.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_().

A. end

B. writeEnd

C. writeEndObject