Lecture 20
Exam Information and Revision

Boriana Koleva
Room: C54
Email: bnk@cs.nott.ac.uk

Overview

- Overview of Course Content
- Exam details
- Revision Multiple Choice Questions

Course Content

- Web enabling infrastructure
  - Networking basics
    - transmission media
    - local communication (encoding data + LANs)
    - long distance comms (modulation + modems)
  - TCP/IP protocols
    - Protocol design
    - Overview of TCP/IP
    - IP addresses and domain names
  - Client server paradigm, Web browsers and servers, URLs, MIME types, HTTP protocol

Course Content

- Mark-up languages
  - XTHML
    - Syntax
    - Basic text markup
    - Images
    - Hypertext links
    - Lists
    - Tables
    - Forms
    - Frames
  - XML
    - Syntax
    - Document Type Definitions
    - Namespaces
    - Displaying XML documents
    - XML Processors

Course Content

- Web document presentation
  - CSS
    - Levels of style sheets
    - Selector forms
    - Property value forms
    - Examples of properties
  - Web design
    - Website design (information structure + navigation)
    - Webpage design (text, graphics, audio, video)
    - What NOT to do
      - Top 10 Mistakes of Web Design
      - Web pages that suck
    - Web Accessibility

Course Content

- Client side scripting
  - JavaScript
    - Syntax
    - Dynamic XHTML
- Server side scripting
  - Overview of SSI, CGI Perl, Java Servlets, ASP.NET
  - PHP in more detail
  - Database access with PHP

Coursework

- 25% of final mark
- Marks and feedback sheet will be available from the school office
  - I will email when marks are ready
    - Certainly available by first day of new term (4 May)
  - Also winning website will be announced

Exam

- 2 hours
- Answer 3 out of 5 questions
  - Each of these questions focuses on a particular topic
    - Web enabling infrastructure
    - Mark-up languages
    - Web document presentation
    - Client and server side scripting

Exam

- Material from all lectures examinable
- There will be questions only on material we have covered in lectures
  - However in the lecture notes there may be just a few bullets or a diagram
  - If you have not been taking notes it may be necessary to consult the suggested further reading in order to understand the topic better and be able to provide full answers

Past Exam Papers

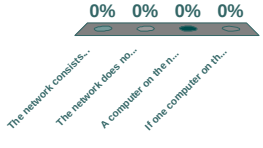
- Available from the portal
  - use the **Library Tab** to search for Exam Papers
  - 2006-2007
  - 2007-2008
  - 2008-2009
- Sample exam paper

http://www.crg.cs.nott.ac.uk/~bnk/Teaching/WPS/G51WPS0607Sample.pdf

(created when module first established)

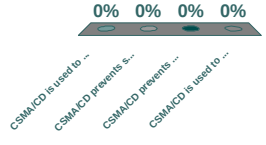
Which of the following statements is **true** about a network laid out using a **bus** topology?

A. The network consists of a closed loop of computers
B. The network does not require any coordination by software
C. A computer on the network can directly send data to any other computer on the network
D. If one computer on the network fails then the entire network fails



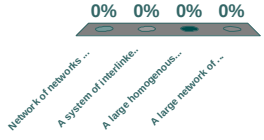
Which of the following is **not** true about the CSMA/CD protocol used by Ethernet networks?

A. CSMA/CD is used to sense the state of the carrier
B. CSMA/CD prevents simultaneous transmissions
C. CSMA/CD prevents computers from interrupting ongoing transmissions
D. CSMA/CD is used to detect packet collisions



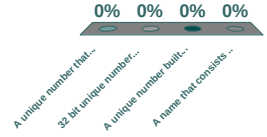
What is the Internet?

A. Network of networks using the TCP/IP protocol
B. A system of interlinked, hypertext documents accessed via web clients
C. A large homogenous network where all computers are identified via their MAC address
D. A large network of computers linked via point-to-point connections



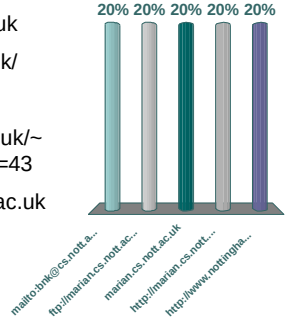
What is an IP number?

A. A unique number that identifies each network
B. 32 bit unique number assigned to hosts and routers that use the TCP/IP stack
C. A unique number built into each Ethernet subsystem by the manufacturer
D. A name that consists of a sequence of alphanumeric segments, separated by period and following a hierarchical convention



Which of the following is **not** a valid URL format?

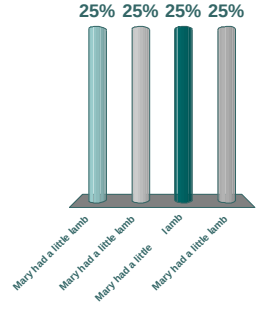
A. mailto:bnk@cs.nott.ac.uk
B. ftp://marian.cs.nott.ac.uk/
C. marian.cs.nott.ac.uk
D. http://marian.cs.nott.ac.uk/~bnk/cgi-bin/db?number=43
E. http://www.nottingham.ac.uk:80/



How will this fragment of XHTML be displayed by a web browser?

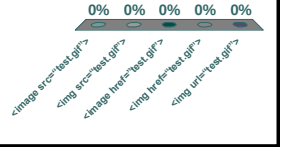
Mary <big> had <big> a little lamb </big> </big>

A. Mary had a **little lamb**
B. Mary had a **little lamb**
C. Mary had a little lamb
D. Mary had a **little lamb**



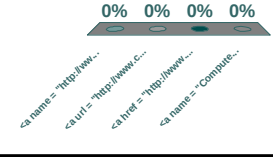
Which of the following is the correct XHTML script for including the image test.gif?

A. <image src="test.gif">
B. <img src="test.gif">
C. <image href="test.gif">
D. <img href="test.gif">
E. <img url="test.gif">



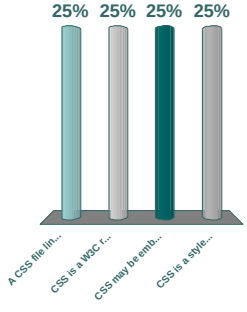
Which of the following is the correct XHTML script for making a hyperlink?

A. Computer Science
B. Computer Science
C. Computer Science
D. http://www.cs.nott.ac.uk/



Which of the following statements is **not** true about Cascading Style Sheets (CSS)?

A. A CSS file linked to a HTML document via the <LINK> tag can control the appearance of only that document and no others
B. CSS is a W3C recommendation, and is now very widely used
C. CSS may be embedded into XHTML using the <STYLE> tag or stored in a separate file
D. CSS is a style language developed for HTML that can also be used with XML



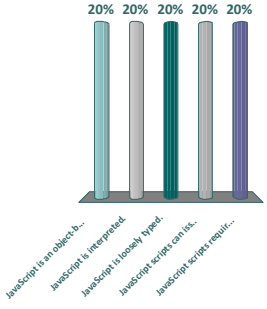
What will be the effect of the following CSS rule:

```
td.red {color: red}
```

A. All table cell elements will appear in red font
B. Table cell elements whose class has been set to 'red' will appear in red font
C. All term definition elements (in a definition list) will appear in red font
D. Term definition elements whose class has been set to 'red' will appear in red font

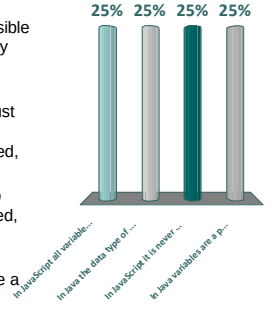
Which of the following statements is **not** true about Java Script?

A. JavaScript is an object-based scripting language.
B. JavaScript is interpreted.
C. JavaScript is loosely typed.
D. JavaScript scripts can issue HTTP requests and load other pages.
E. JavaScript scripts require the Java Virtual Machine to be loaded.



One of the differences between Java and JavaScript is that Java is said to be a "strongly typed" language whereas JavaScript is "loosely typed". Which of the following is the most appropriate description of this distinction?

A. In JavaScript all variables are accessible within an HTML document (effectively global), whereas in Java scoping is tightly controlled
B. In Java the data type of variables must always be specified, whereas in JavaScript data types are not declared, even when variables are
C. In JavaScript it is never necessary to declare variables before they are used, whereas in Java this is essential
D. In Java variables are a property of a class, whereas in JavaScript they are a property of a document

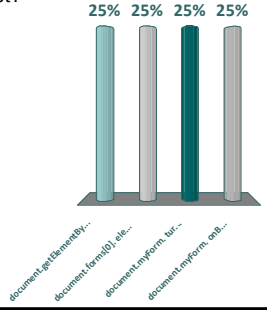


Given the following XHTML:

```
<form name = "myForm"  action = "">
      <input type = "button"  name = "onButton"
         id = "turnItOn">  </form>
```

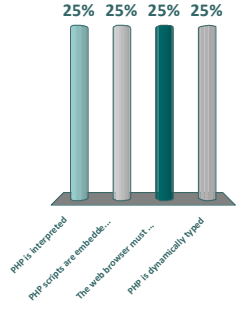
Which of the following is **not** a correct way to address the button in JavaScript?

A. document.getElementById("turnItOn")
B. document.forms[0].elements[0]
C. document.myForm.turnItOn
D. document.myForm.onButton



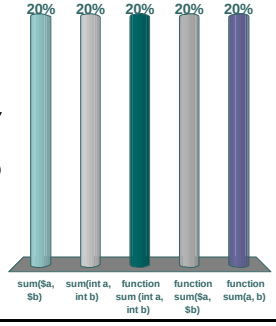
Which of the following statements is **not** true about PHP?

A. PHP is interpreted
B. PHP scripts are embedded in XHTML documents
C. The web browser must support the PHP system in order to display the result of PHP scripts
D. PHP is dynamically typed



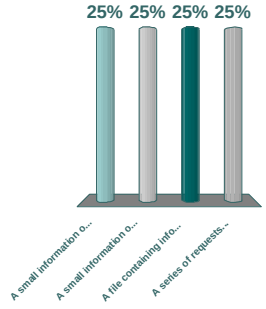
Which of the following is the correct way to define a PHP function with name “sum” that should take and add together 2 integer parameters named “a” and “b”

A. `sum($a, $b)`
B. `sum(int a, int b)`
C. `function sum (int a, int b)`
D. `function sum($a, $b)`
E. `function sum(a, b)`



What is a *cookie*?

A. A small information object consisting of a name and a textual value stored on the client
B. A small information object consisting of a name and a textual value stored on the server
C. A file containing information about clients stored on the server
D. A series of requests between a client and a server



Which of the following statements is **not** true about XML?

A. XML is a metalanguage
B. XML was designed for the WWW, but is also applicable in many other areas
C. XML allows you to define a set of tags appropriate to your domain
D. XML is a display format