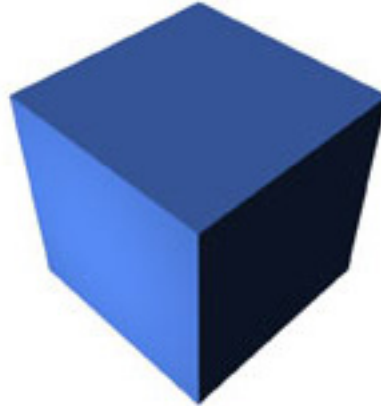# TEST KING

LEADING THE WAY IN IT
TESTING AND CERTIFICATION TOOLS!

CIW FOUNDATIONS

Version 1.2

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QUESTION NO: 1
Which technology enables businesses to create multimedia applications to deliver their messages?

    A.   Push technology
    B.   Pull technology
    C.   Media access technology
    D.   Neo-Web technology

Answer: A.
Explanation: The push technology is an Internet client/server technology which can be used for multimedia applications to deliver their messages. Most traffic on the Internet use the Pull technology. We pull the web pages from the web services when we browse the Internet. Pull technology isn't, however, used by multimedia application when they are delivering their messages (not B). There are currently no Internet communication technologies called Media access or neo-Web (not C, D).

QUESTION NO: 2
A user at her workstation cannot reach any host on the Internet using ping, yet she can ping all the file and print servers on her local LAN. You investigate the problem, and discover that one of the following configuration parameters is missing. Which parameter is missing?

    A.   The default gateway
    B.   The IP address
    C.   The subnet mask
    D.   The DHCP server address

Answer: A.
Explanation: The clients in this scenario are using TCP/IP. The minimal requirement for a computer configured for TCP/IP is an IP address and a subnet mask. The client is able to function on the LAN so the IP address and the subnet mask must be correct (not B, C).

The default gateway setting is used to get access outside the local LAN. This is apparently the problem in this scenario. The TCP/IP configuration settings don't include addresses to DHCP Servers (not D). The initial communication between DHCP clients and the DHCP Server use broadcasts so the IP address of the DHCP server is not needed.

QUESTION NO: 3
 Which component is necessary to connect to the Internet?

A.   An Ethernet cable
B.   SMTP
C.   A web browser
D.   TCP/IP

Answer: D.
Explanation: TCP/IP is the protocol of Internet. You cannot connect to Internet without it. You don't need an Ethernet cable (not C), instead you, for example could use the telephone line to connect to the Internet. SMTP is a mail-protocol and it only supports e-mail not Internet connectivity (not B). Most people use web browsers when they are using the Internet, but it isn't necessary.

QUESTION NO: 4
Consider the following HTML code:

<IMG SRC= "FaceImage.gif" USEMAP= "#FaceMap">

In this code, what does the hash symbol (#) mean?

A.   FaceMap is an image map defined on another page within your web site
B.   Use the FaceMap image as an image map with default coordinates
C.   FaceMap is an image map defined within the same HTML file
D.   Apply the coordinates defined in a <FaceMap> tag to the FaceImage .gif graphic

Answer: C
Explanation:
The USEMAP= "#FaceMap" attribute with the IMG element specifies that an image map with the name of FaceMap should be used on the image. The FaceMap image map must be defined at another location within the same HTML document.

The USEMAP= "#FaceMap" attribute and value specifies a local reference within the same HTML document. This image map must be included in the same HTML document (not A).

The <IMG ISMAP> tag is used to use the image as an image map (not B).

The image map must be defined with the MAP tag. HTML doesn't support a <FaceMap> tag (not D).

Insert a reference to link the image to an image map
Insert a reference to the 'map' tag to tell the image which map to use.

Note: An example of the use of an image map.
First we define a map name. We insert the same name for the map as was specified in the USEMAP attribute above. Then we define the map with area elements. The code is included in the same HTML file as the code from the question above.

```
<map name="#facemap">
<area shape="rect" coords="left-x, top-y, right-x, bottom-y">
<area shape="circle" coords="center-x, center-y, radius-x">
<area shape="poly" coords="x1,y1, x2,y2 x3,y3, ...">
</map>
```

QUESTION NO: 5
Which choice best describes the <code>, <kbd> and <samp> tags?

    A.   These are examples of block level tags in HTML 4.
    B.   These tags are used to build HTML 4 forms.
    C.   These tags have been retracted from HTML 4 and should not be used.
    D.   These tags can make text appear in a fixed font in an HTML 4 compliant browser windows.

Answer: D.
Explanation: These tags are used to make text appear in a fixed font:
<CODE> denotes program code which will be displayed with a font with a fixed width. Typically Courier is used.
<KB> denotes typed text. The text will be displayed with a font with a fixed width.
<SAMP> denotes sample program output. The text will be displayed with a font with a fixed width.
The <code>, <kbd> and <samp> tags are text-level elements not block-level elements (not A). These tags are not used to build forms. They are used to format text (not B). These tags are supported in HTML 4.0 (not C).

QUESTION NO: 6
Several tags must appear in an HTML file. Which of the following choices list required tags in the current sequence of the appearance?

    A.   <body, head, HTML>
    B.   < head, HTML, body>
    C.   <head, body, HTML>
    D.   <HTML, head, body>

Answer: D.
Explanation: An HTML file has the following structure:
<HTML>
<HEAD>
</HEAD>
<BODY>
</BODY>
</HTML>
The order of the tags is HTML, HEAD, BODY.

QUESTION NO: 7
What is the correct definition for a block level tag?

    A.   A block level tag is a HTML element that affects one or more paragraphs.
    B.   A block level tag affects an individual character or word.
    C.   A block level tag does not require a paragraph break before the tag is used.
    D.   A block level tag creates a table border.

Answer: A.
Explanation: A block level element, or tag, affects one ore more paragraphs.
A block level tag cannot affect individual characters or words (not B). A paragraph break tag could be required for a block level tag since the previous paragraph might have to be ended (not C). Block level tags affects entire paragraphs, not individual tables.

QUESTION NO: 8
Which statement is true regarding the <P> and <BR> tags in HTML 4.0?

    A.   Both tags require start and end tags.
    B.   Both tags never require end tags.
    C.   The <BR> tag never requires an empty tag.
    D.   The <P> tag never requires an empty tag.

Answer: C.
Explanation: The <BR> tag never requires a </BR> tag. The </BR> tag is called an empty tag.

Neither tag requires end tags (not A). The <P> would require an </P> tag if you want to end the paragraph explicitly (not B, D).

QUESTION NO: 9
Which tag must appear within an HTML table?

    A.   <TR>
    B.   <CLL>
    C.   <Caption>
    D.   <TC>

Answer: A.
Explanation: The <TR> tag defines a table row.
The <CAPTAIN> tag can provide a caption for a table. It is not a required tag though (not C). There are no <CLL> or <TC> tags (not B, D)

QUESTION NO: 10
Gari uses the following code in an HTML file:

<BODY>
<DIV ALIGN= center>
Trees help maintain soil stability
</DIV>
<B> planting tips</B>
</BODY>

Assume that this text will appear in an HTML 4.0 compliant graphical web browser. The browser window is maximized on a VGA (640 x 480 pixels) screen using a 12-point Times Roman font. Which choice best describes how this section of text will appear in the web browser?

    A.   The sentence "tree help maintains soil stability" will be centered at the top of the browser window. The phrase "planting tips" will appear below the sentence above trees.
    B.   The sentence "tree help maintains soil stability" will appear in the center of the browser window. The phrase "planting tips" will appear at the bottom left of the browser window.
    C.   "Trees help maintains soil stability" and "planting tips" will each appear centered at the top of the browser window.
    D.   The sentence "trees help to maintain soil stability" will appear at the top center of the browser window. The phrase "planting tips" will appear at the bottom center of the browser window.

Answer: A.
Explanation: The DIV tag will create a division of the document where the text is centered. The code following the DIV tag will create a line of bold text which will be located under the centered text on the next row.

The phrase "planting tips" appears on the next row, not at the bottom left of the browser windows (not B). The text "planting tips" will not be centered. The ALIGN=center attribute is only valid for the DIV tag (not C). The text "planting tips" will not be centered and will not be located at the bottom left of the browser windows (not D).

QUESTION NO: 11
Which of the following choices is an example of country-level domain?

    A.   EDU
    B.   CA
    C.   INT
    D.   MIL

Answer: B.
Explanation: CA for Canada is a country level domains. So other country domains are: uk, au, ch, jp. EDU is for education, and is used for education institutions, such as universities, so A is wrong. INT is not a high-level domain node, so C is wrong. MIL is for military, and is not a country code.

QUESTION NO: 12
In the client server model on the World Wide Web which of the following is the best example of a client?

    A.   A web site.
    B.   An Internet browser.
    C.   An FTP server.
    D.   A database.

Answer: B.
Explanation: an Internet browser, such as Internet Explorer or Netscape Navigator, are referred to as thin clients. Very little work is done at the client, although client side scripts can be executed. A browser connects to a Web Server, the other side of the Client/server model. A web site, is an example of the Web Server, and is a

server, not a client, so A is wrong. FTP is also a server, so it is not a client, so C is wrong. A database is neither a client or server, so D is wrong.

QUESTION NO: 13

Kelly wants to search the Internet for information about intellectual property. She enters the following string in a search engine. This string returns too many results. Which string can Kelly enter to narrow her search results?

    A.   (intellectual property)
    B.   intellectual NEAR property.
    C.   Intellectual+property.
    D.   "Intellectual property"

Answer: C.
Explanation: By using a plus sign, the words intellectual and property will be searched as the phrase intellectual property, and will narrow the search to that specific phrase. Adding parentheses does not narrow the search, so A is wrong. Use of the NEAR function will reduce the search, since property will have to be near intellectual, but this is not as fine as using the + sign, so B is wrong. D is wrong, as this is what Kelly probably entered in the first place, and this produces a hit on any document that has both or either word in it, so D is wrong.

QUESTION NO: 14

Which of the following is defined as the open set of technologies for integrating components on the Internet and within Microsoft applications?

    A.   Java scripts.
    B.   Active X.
    C.   C++
    D.   Client/server system.

Answer: B.
Explanation: Active X is exclusively Microsoft and for used in Internet applications. Java Scripts provide the same functionality, is not exclusive to Microsoft applications, is provided by SUN systems and licensed to the makers of the interpreters, so A is wrong. C++ is a programming language, which can also be used, but is not Microsoft specific, so C is wrong. Client/Server is a model for applications, but is not an open set of technologies nor is it Microsoft exclusive, so D is wrong.

QUESTION NO: 15
MARC designed a web site for his company, Mark's cleaning service. How can Mark ensure that people using a web search engine find his company when they search for cleaning services?

    A.   Submit his site at all major web search engines.
    B.   Use the HTML <meta> tag to specify cleaning service key words for the page.
    C.   Wait for a robot to index his web site.
    D.   Use catchy name to attract attention to his web site.

Answer: B.
Explanation: The <META> tag is placed in the HEADER and contains information on the content of the web page. The <META> tag can be used to define keywords that describes the content of the page. Automated agents of the search engines would, hopefully, eventually find Mark's page and index it according to the keywords specified in the META tag.

Only submitting the URL to his web site to all major search engines would enable them to index his page in the keywords that Mark thinks are important (not A). A robot would probably eventually index his web site, but it would not use any keywords. The keywords must be specified with a META tag (not C). Using a catchy name will not help customers who search for a cleaning service to find the site.

QUESTION NO: 16
Which of the following was the major feature of the Arpanet?

    A.   It was designed to facilitate international business-to-business commerce.
    B.   It was without a central hub so that control was spread throughout the network.
    C.   It was a private business venture.
    D.   It operated from a central hub.

Answer: B.
Explanation: The Arpanet, the predecessor of the Internet, was a form of mesh connections, with no specific hub or central point of control. It was built by the government and universities, built by DOD (Department of Defense) in 1968, and was called the Advanced Research Project Agency Network, so A and B are wrong. Since it was not a central hub, D is wrong.

QUESTION NO: 17
Which of the following is an example of the browser plug in?

A.   Real networks real audio.
B.   Netscape navigator.
C.   Microsoft windows.
D.   Microsoft power point viewer.

Answer: A.
Explanation: Real networks audio is a common browser plugin. Netscape Navigator is a Browser, and not a plugin, so B is wrong. Microsoft Windows is an Operating System, and not a plugin, so C is wrong. Power Point viewer is a program used to display and run PowerPoint Presentations without the PowerPoint software itself. This version of the software does not run as a browser, so D is wrong.

QUESTION NO: 18
Pia has been searching for the web for a gift for her son Frank. Frank asks to use the computer. Pia wants to make sure that Frank can't see which sites she has visited. What should Pia do?

A.   Disable image loading on the browser.
B.   Disable cookie download.
C.   Clear the browser history.
D.   Stop the browser the restart it.

Answer: C.
Explanation: By clearing the browser history file, Pia has erased the trail of the websites she has visited. The history keeps track of the last web pages visited. How much is stored is controlled by configuration settings. Image loading on the browser prevents images from displaying, which has no effect on the previous sites visited, so A is wrong. Disabling cookie download will prevent cookies from being downloaded, but this is after the fact, as any cookies created by Pia will still be in the cache, so B is wrong. Stopping the browser and starting it again does not erase any data in the caches – unless certain options are selected to clear the cache when the browser is stopped, and this is NOT the default, so D is wrong.

QUESTION NO: 19
Which of the following items is an example of a valid e-mail address?

A.   james@smith.com
B.   james%smith.com

C.   james:smith.com
D.   james#smith.com

Answer: A.
Explanation: A valid e-mail address is made up of a email account and a domain name of the mail server domain, separated by a @ sign. All the other formats are not valid.

QUESTION NO: 20
Which of the following is the most important criterion for selecting an internet service provider?

A.   Proximity to your home.
B.   Good technical support.
C.   Support for your desired connection type.
D.   Good on line content.

Answer: C.
Explanation: Support for the connection type is the most important, if you can't connect, then you are going nowhere. Proximity to the home is not important for ISP selection, however this does come into consideration for DSL (Digital Subscriber Line), but is only a small percentage of ISP offerings, so A is wrong. Technical support is also important for ISP selection, but not as important as being able to connect and operate in the first place, so B is wrong. Online content offered by an ISP has its value, but is much lower on the list of important offerings, so D is wrong.

QUESTION NO: 21
Homer is interested in installing a full text search engine on his corporate intranet. His IT manager advises him against this. For which reason homer choose not to install a full text search engine?

A.   Full text search engine are highly complicated to use.
B.   Full text search engine are less time consuming than key word searches.
C.   Full text search engine consume a large number of resources.
D.   Full text search engine are not yet technologically possible.

Answer: C.
Explanation: Full text search engines consume a large amount of resources, such as Disk Space to store the indexes, CPU to crunch the data into indexes, and network bandwidth to read the websites to collect the data to be indexed. In addition, each website undergoes extensive resource consumption as the entire website is read

and processed, every valid web page has to be read and processed at least once. Full Text search engines are easy to use, and are technology possible so A & D are wrong. Since a full text search involves the collection and search of a larger database than would be generated by a keyword search, full text is more time consuming than keyword searches. However, keyword searches will use less resources than full text searches, but is still resource intensive. So B is wrong.

QUESTION NO: 22
You work in an information technology department for a large company. A manager in another department tells you that she needs access to an online forum to discuss issues within her department. Which solution should you implement for the manager?

A. Create a newsgroup that each member of the department can access.
B. Write an easy ASP application that allows file sharing.
C. Create an e-mail mailing list that allows you to enter a single department name then e-mails the spreadsheet to all department members.
D. Install an FTP server that can house the spreadsheet.

Answer A.
Explanation: Newsgroups was created for this type of job. What you need is a discussion forum that people can post to, and see what other users have posted. Newsgroups provide this type of forum and format.
Incorrect answers:
Writing an ASP application for file sharing does not provide a discussion forum unless you write out a full fledge bulletin board system (BBS), which is not practical. What they mean here is going in via the web and sharing a file on the web server. One reason why this is not a good idea is that any one can wipe out or corrupt the file, or delete entries of other users. For these reasons B is wrong, and under the same concept so is D. The concept in C, which is sometimes used, is called a list server. It is not as efficient as a newsgroup, and can fill up a user's e-mail account, and messages can be lost, or might not be in order. These are weaknesses in the listserve concept, and since newsgroups are the best here, C is wrong.

QUESTION NO: 23
Which protocol would you use to set up a news server?

A. NNTP.
B. FTP.
C. SMTP.
D. HTTP.

Answer: A.
Explanation: Network News Transmission Protocol, NNTP is used for New Server setup. FTP is File Transfer protocol, SMTP is Simple Mail Transmission Protocol, and HTTP is Hyper Text Transmission protocol., so B, C & D are wrong.

QUESTION NO: 24
Which Netscape browser function allows you to assign short cuts to web pages that you visit frequently?

    A.   Bookmark.
    B.   History.
    C.   Go to.
    D.   Home.

Answer: A.
Explanation: Netscape uses Bookmarks and Internet Explorer uses Favorites. Home is used for the Home page, so D is wrong. Home refers to the home page that appears when the browser is started, and History is a cache of previously visited web pages, so B & D are wrong. There is no Go To function, so C is wrong.

QUESTION NO: 25
Mikail receives an e-mail message from a friend that contains a zip file. He opens the file later Mikail notices that his e-mail application has sent a copy of that zip to each person in his address book without his commanding it to do so. What event has most likely occurred?

    A.   Mikail has accidentally sent a mass e-mail to every one in his address book.
    B.   A virus has infected Mikail's computer.
    C.   A hacker has taken over Mikail's computer.
    D.   Mikail's e-mail application has malfunctioned and must be replaced.

Answer B.
Explanation: This has become a common virus attack on systems. Accidentally sending the e-mail to everyone is very unlikely, so A is wrong. Although a hacker could have taken over the computer, sending the zip file out is unlikely for this type of attack, so C is wrong. It is highly unlikely that the email application all of a sudden malfunctioned and did a mass mailing, so D is wrong.

QUESTION NO: 26
Which of the following best describes the registered port numbers?

A. Port numbers ranging from 1024-49151 that any process can use.
B. Port number that ranging from 1 to 1023 used by TCP and UDP to identify well know services that a host can provide.
C. Port numbers reserved exclusively for World Wide Web services.
D. Port numbers reserved exclusively for DNS services.

Answer: A.
Explanation: this is the range above the well know port numbers and below the private and dynamic port number range. Since 1-1023 is the well know ports, and below the registered range, B is wrong. Port numbers for WWW and DNS fall within the well know range, so C & D are wrong.

QUESTION NO: 27
Ralph manager wants a server that can offer steaming audio and video over the network. Which type of server should Ralph recommend?

A. A proxy server.
B. Mailing list server.
C. A media server.
D. A news server.

Answer: C.
Explanation: a media server is used for media such as streaming audio and/or video. A proxy sever is used for network protection, like a firewall, a mailing list server is used for mail, and a news server is used for discussion groups, so A, B & D are wrong.

QUESTION NO: 28
Which security protocol is a virtual private network most likely to use?

A. Point to point tunneling protocol.
B. SSL secure socket layer.
C. Frame relay.
D. One way encryption (hash encryption).

Answer: A
Explanation: VPN (Virtual Private Network) creates a path between two points like a private channel. This channel is called a tunnel. PPTP is the most common VPN used today. Another protocol used in VPNs is L2TP (Layer 2 Tunnel Protocol), which is new and currently only available in Windows 2000. SSL is a secured mode between client and server and is used for HHTP & FTP. This does not create a tunnel, and would not be used for the private network itself, so B is wrong. Note that a client and server at different ends of the tunnel may use SSL between themselves, but this is transparent to the VPN itself. Frame Relay is not a security protocol, and is not used as a private network, although you can create tunnels through a frame relay system, so C is wrong. Encryption is used to encode data, it is not a protocol, it has to be used with a protocol to create and secure a private network, so we rule out D. Keep in mind that PPTP and L2TP do NOT imply that the payload is encrypted, encryption is optional. When selected, PPTP will use MPPE and L2TP will use IPSec, and in those modes will provide a secure channel across the VPN.

QUESTION NO: 29
Birgitta is working on a research project and she finds a web site with several useful links. You want to make sure that she can return to the same web site. How can Birgitta make sure that she can visit the same web page again?

    A.   Store all images from the page in the browser cache so that she will recognize them when she sees them again.
    B.   Add the page to the favorites or bookmark features of the browsers.
    C.   Return the two pages using browser history.
    D.   Keep the page open in the second browser window.

Answer: B.
Explanation: Add this to the Favorites feature of Internet Explorer or Bookmark feature of Netscape. This will remain in that folder until explicitly deleted. Since you want to MAKE SURE that she can get back, you need to make sure that the entries are not saved in a place that won't go away. Saving the images in the cache is of no use, they are stored there anyway, and depending on the caching rules, could be deleted at any time, like when the cache is full and room has to be made. And the images could be common to different websites, and browsing the cache is difficult and not optimized for that type of activity, therefore A is wrong. Browser history is easily cleared, and has a short life, and can't be considered for long-term retention, so C is wrong. Keeping the page open in a different windows works until the user has to logoff or the machine booted. In addition, sometimes when the browser (this happens with Internet Explorer) crashes, it brings down all OPEN browser windows, in any case, this is not a long-term storage of the information, so D is wrong.

QUESTION NO: 30
Which of the following best explains how encryption works on the World Wide Web?

A.   Encryption allows only specified users access to web sites that offer online shopping.
B.   Encryption validates a user name and password before sending information across the World Wide Web.
C.   Encryption encodes information using specific algorithms using a string of numbers known as a key.
D.   Encryption works only in transactions z-shoes Microsoft Internet explorer.

Answer: C.
Explanation: Encryption uses an algorithm to encrypt the data, using keys. There are keys to encrypt the data, and keys to decrypt the data, unless the key structure is symmetric, then only one key is required. Common encryption schemes used on the WWW are through SSL (secure sockets layer) which uses PKI (Public Key Infrastructure) which has a public key and a private key pair. Although DES is a common algorithm, many browsers use the RSA algorithm instead. Encryption is not what controls access to web sites, access control does that. If a userid and password are required, or a certificate, this is handled by the security routine. This is a use of encryption, not a definition of how encryption works, so A is wrong. For almost the same reasons, B is wrong, encryption does not validate userid and password, and encryption is the process of scrambling data so that only persons with the correct keys can read that information. Encryption is not restricted to any one specific browser, Netscape supports encryption and the SSL (secure sockets layer) protocols, so D is wrong.

QUESTION NO: 31
Siobhan is trouble shooting her network and needs to determine whether she can prove connectivity between a source and destination system. Which is the best network diagnostic tools for Siobhan use to test connectivity?

A.   Ping.
B.   Tracert.
C.   Netstat.
D.   IP config.

Answer: A.
Explanation: The ping command, which uses ICMP, will show connectivity to another node by providing the round trip time to reach the node and back. If the node cannot be reached, the command will time out. Since a message has to physically arrive at the destination, and a response received from that destination, a transmit and receive had to be performed over the physical network, and will prove connectivity. Now tracert will also do the same thing, and prove the point, but it has more output, which can be confusing, because tracert is used for troubleshooting, and is a modified form of the ping command, using ICMP. Tracert will also take longer to to run, and we are looking for the best tool, so we will rule out B. Netstat and IP Config display configuration information, and can only prove that the configuration is good, but does not prove connectivity. For example, there could be a break in the network, the network cable could be unplugged, etc, so C & D are wrong.

QUESTION NO: 32
Your data base administrator installed a database for you to store information from your server side scripting. The database is stored on a server running Windows NT. What must you do first in order to gain access to the database?

    A.   Write a custom interface to put data into the database.
    B.   Create a data source name to connect to data using ODBC.
    C.   Use active server pages ASP to interface with the database.
    D.   Use PERL to interface with the database.

Answer: B.
Explanation: as an application, a database connector is required, in this case ODBC will be used, and requires a DSN (Data Source Name). Each database has its own database engine to controlling the database, so you do not use a custom interface, and connectivity to databases are made database independent by using a common interface, such as the ODBC routines, so writing something custom is out of the ordinary and A is wrong. Although you can write ASP to access the database, when writing the code, you still use ODBC calls to access the database, so you need the DSN first, so C is wrong. PERL will interface the database through ODBC, so for the same reason D is wrong.

QUESTION NO: 33
Which of the following best describes dynamic host configuration protocol?

    A.   The LAN access method used by Ethernet.
    B.   An IP address that allows a client and server on a same host to communicate with each other.
    C.   A protocol for assigning dynamic IP addresses to devices on a network.
    D.   A mask that allows numerous sub networks to exist within a network.

Answer C.
Explanation: more commonly known as DHCP, a pool of IP addresses are assigned to nodes on the network. Each IP addresses is leased to the node, which when expired, releases the address back to the pool. DHCP also allows assignment of IP parameters, such a Subnet Mask, Default Gateway, and name server addresses. CSMA/CD is the LAN access for Ethernet, so A is wrong. A client and server on the same host can communicate with each other using the single IP address assigned to that node, although sometimes the loopback address (127.0.0.1) is used, so B is wrong. The mask is known as a Subnet Mask, and does not describe DHCP, so D is wrong.

QUESTION NO: 34
Which IP class causes 8 bits for network portion and 24 bits for the host portion of the addresses?

    A.   Class A.
    B.   Class B.
    C.   Class C.
    D.   Class D.

Answer: A.
Explanation: A class A address uses a 8 bit network, with 24 bits for the host. A class B uses 16 bits for network and 16 bits for host, so B is wrong, A class C uses 24 bits for network and 8 bits for host, so C is wrong. A class D address is a multicast address, and does not fall within the concept of network/host, so D is wrong.

QUESTION NO: 35
Todd is a systems administrator for a small company. One morning, he notices that one of the accounts on the network is locked out because the multiple login failures. What event has most likely occurred?

    A.   The account was the target of a brute-force attack.
    B.   The account was the target of a spoofing attack.
    C.   The account was the target of a Trojan horse attack.
    D.   The account was target of a social-engineering attack.

Answer: A.
Explanation: since there were multiple login failures, there was multiple failures, indicating trial and error of several to many different passwords. This is a symptom of a brute force attack, where attempts are made to try all possible passwords. A spoofing attack is when someone changes their identity to make them look like someone else, and that type of attack would not be reflected in logons, so B is wrong. A Trojan Horse attack

would not occur unless the login was successful, because the code had to be already transported to the user, and would not be reflected in failed logons, so C is wrong. Social Engineering would be calling the user and getting them to give up the password, so if this was done, the hacker would have gotten in on the first try, and there would never had been any failures, so D is wrong.

QUESTION NO: 36
Sewean is trouble shooting an active server based script that he wrote on a system. The system runs as expected until it tries to access the database server then it produces an error. Which is the one possible reason for this problem?

    A.   The database server is not configured properly.
    B.   The script needs to be debugged.
    C.   Sewean system does not have the permission to execute his query on the database server.
    D.   Sewean should switch scripting languages. ASP is not designed to execute queries on databases.

Answer: C.
Explanation: we could assume that since the script has been previously written, and now is being run, that it was tested and working previously. So having a failure now, would indicate that the database server was down, not reachable, or there was a security issue, such as permissions. The most likely is permission issues. Although the database server may be misconfigured, this means that it never worked, or was changed recently. But if it was changed recently, it could be tested using different scripts or access tools, and configuration changes are rare, but not as likely as permissions, so we rule out A. Maybe the script needs some more debugging, but as a previously working script, and only failing on the database call indicates that the problem lies more in the communications between the script and the database, so we rule out B. ASP is designed to handle database calls, so D is wrong.

QUESTION NO: 37
Which hardware device operates on the network layer of the OSI reference model?

    A.   Repeater.
    B.   Hub.
    C.   Bridge.
    D.   Router.

Answer: D.
Explanation: when we say network layer, we are also saying Layer 3. A router is a layer 3 device, and supports up to the network layer of the OSI model. A repeater and HUB are devices that extend the physical

medium, and operate on the Layer 1 or Physical Layer level, so A & B are wrong. A bridge operates at the Data Link Layer, it is a Layer 2 Device, so C is wrong.

QUESTION NO: 38
Bekah is creating a web page that contains images that uses a proprietary graphic format. How can she ensure that client systems identify her image type?

    A.   Create a special extension for the images that is easy to understand.
    B.   Define a MIME type to accommodate the proprietary formats.
    C.   Convert the graphic to a GIF before posting it on the web.
    D.   Ensure that web browsers have the correct permissions to download her graphic type.

Answer: A.
Explanation: a special extension is used to identify programs or routines that can process a file. The extension would be associated with that program. For example, the PDF extension is associated with Adobe Acrobat. Now the question talks about identifying the image type, but realize that no one can process that graphic that unless they have the program installed and associated to that extension. Mime is used with e-mail to ship non-text items, such as the graphic, but the graphic is already on the website and being accessed, so Mime is not relevant here, so B is wrong. Conversion of the graphic to another format may lose some of the proprietary features of the original graphics, and would not be advisable, so we will rule out C. This is an identification issue, not a permission issue, so D is wrong.

QUESTION NO: 39
Hildegard is the IT manager for a large company. She notices that she is receiving increasing number of complaints from employees saying that web sites they visit frequently are not updated in their browser. How should she investigate the problem?

    A.   Hildegard should investigate the company's web server to see if the server interferes with the employee's browser.
    B.   Hildegard should examine the caching settings on the company's proxy server.
    C.   Hildegard should examine the company's certificate server to verify that company certificate are not expired.
    D.   Hildegard should examine company media server to verify that it is functioning properly.

Answer: B.
Explanation: we have multiple users complaining, so likely it is a widespread problem on the server end. Some proxy servers, such as Microsoft Proxy Server and Microsoft ISA server can operate in a caching mode, in

which the proxy server caches the retrieved pages. If there is a problem with this caching, everyone in the company will get the same stale pages – stale because the proxy server is not refreshing or updating its cache content. The web server should not interfere with the browser, unless it is sending the wrong TTL for the pages, a possibility, but not likely for this situation, so we will rule out A. Expiration of a certificate should not have an effect on the web pages that come up, so C is wrong. The media server would be used to serve out sound and video streams, and not individual web pages, so D is wrong.

QUESTION NO: 40
You want to buy stock in a company and you need some unbiased information about the company's business practices. Which is the best way to learn objective information?

    A.   Visit the company's website.
    B.   Research the company in a news group.
    C.   Create a mailing list that sends messages to several employees in the company asking them for the information.
    D.   Review the company's stock at yahoo.com

Answer: B.
Explanation: Using a newsgroup allows you to set up a discussion on this topic. Subscribers to the newsgroup can make comments, other subscribers can see those comments and comment on them, and if you are getting responses, you can collect a lot of information. A company's website and direct communications with company employees would not be considered "unbiased", so A & C are wrong. Looking at a stock price, and performance history tells you what the stock did in the past, but you are interested in the future growth of the company, and past performance does not guarantee future growth. This is not the best way to meet the objective, so D is wrong.

QUESTION NO: 41
Which term best describes an order application in which a company organization has already invested significant time and money?

    A.   Backbone application.
    B.   Legacy application.
    C.   Internal application.
    D.   IT infrastructure.

Answer: B.

Explanation: The key here is that the company has already invested significant time, meaning this is an application that has been around for a time. Another keyword here is invested. This all points to a legacy application. This is or may be an internal application, but we are looking for the best term, which is legacy, so C is wrong. This is not IT infrastructure, which is a much larger picture that encompasses all the applications and the operations among them, so D is wrong.

QUESTION NO: 42
Which of the following is defined as an interpreted object based scripting language developed by Netscape communications that adds intra-activity to the web pages?

    A.   Java Scripts.
    B.   Active X.
    C.   C++
    D.   Client/server system.

Answer: A.
Explanation: JavaScript was developed by Netscape and is a client-side interpreted script language.

ActiveX is program component created by a Microsoft Programming tool like Visual Basic 6.0 or Visual C++ 6.0. ActiveX is not a scripting language (not B). C++ is a programming language and not script language (not C). JavaScript is not a Client/Server system. JavaScript runs on the client but cannot access the server.

QUESTION NO: 43
Which IP class uses sixteen bits of network portion and 16 bits of host portion of the addresses?

    A.   Class A.
    B.   Class B.
    C.   Class C.
    D.   Class D.

Answer: B
Explanation: Class B is 16 Network and 16 Host. Class A is 8 bits network, and 24 bits host, and Class C is 24 bits network and 8 bits host, so A & C are wrong. Class D is multicast, and does not fall in the Network/Host breakdown, so D is wrong.

QUESTION NO: 44
You frequently use e-mail at your work place and notice that the delivery time is increasing for messages you sent to people outside of work. What is the possible cause of the slow delivery time?

A.   The company's firewall is serving as a bottleneck slowing down traffic to outside addresses.
B.   Increased network traffic within the company's LAN is slowing delivery.
C.   The people around you are using a different e-mail application which slows mail processing time.
D.   The company's mail server need to be upgraded so that it can process more external traffic.

Answer: A
Explanation: With the key here being outside of work, these e-mail messages are being shipped to another mail server somewhere else, and has to travel through the firewall. If it were a LAN capacity problem, then ALL email would suffer delay, so B is wrong. If you used a different application, you should still not have a different delay for internal vs. external email traffic, so C is wrong. If the mail server needed upgrading, then this would affect BOTH internal and external traffic, a mail server usually does not process external traffic differently, although the mail server does have to do server-to-server transfer of the mail messages. Server to server transfer delay is subject to network congestion and the availability of the destination server. There is a possibility that upgrading might help, but bottlenecks at the firewall are more likely, so we will rule out D.

QUESTION NO: 45
As an IT manager for a small company. Robert must choose which transmission media to implement for the corporate network. His company has two locations across town from one another. Which of the following should Robert implement between the two locations?

A.   Category 4 cable.
B.   Category 5 cable.
C.   Thin coaxial cable (thinnet).
D.   Fiber optic cable.

Answer: D.
Explanation: fiber optic cable would be the best since it can be used over long distances, like several kilometers. This is an expensive solution, requiring special equipment and the laying of cable, but compared to the other options – it is the only option that provides the distance required. For 10 BaseT, category 5 cable gives 1000 meters, and 100 BaseT gives 100 meters. A, B & C can all be rules out.

QUESTION NO: 46
Which hardware devices connects computers in a starred configured network so that it can exchange information?

A. Repeater.
B. Hub.
C. Bridge.
D. Router.

Answer: B.
Explanation: a hub provides a configuration similar to a star configuration. The hub is the central unit (HUB) and the computers connected are the spokes. A repeater extends the length of a cable by amplifying the signal, so it does not apply. Bridges and Routers provide LAN separation, which result in network isolation, and therefore does not fit the star configuration, so C & D are wrong.

QUESTION NO: 47
Daniel plans to upgrade his company's network. His company currently uses category 5 cable. Which is the easiest and least expensive solution for Daniel to increase company's network bandwidth potential?

A. Upgrade the network using thin and coaxial cable.
B. Upgrade the network using fiber optic cable.
C. Upgrade the network to category 6 cable.
D. Install a new wireless network.

Answer: B.
Explanation: fiber optic cable will provides the highest bandwidth, or at least a higher bandwidth than his category 5, which is rated at 100Mbps. Fiber Optics can get into the Gigabit range. Fiber Optic is expensive, but the other solutions don't work, so we stick with B. Coaxial Cable is also expensive, but used in LAN specifications, this type of cabling does not provide speeds in excess of CAT 5 specs. Category 6 Cabling does not exist (yet), so C is wrong. And a wireless network is 11Mbps, and nowhere near what CAT 5 provides, so D is wrong.

QUESTION NO: 48
Which of the following is a junction between one high-speed network and another?

A. Segment.
B. Network access point.

C.   Wide area network.
D.   Local area network.

Answer: B.
Explanation: a Network Access point is provides by a device, usually a router or high-speed switch, to connect networks. (A Switch in this case would be used in ATM). A segment is the smallest part of a LAN, and not a junction, so A is wrong. WAN and LAN are networks in themselves, they are not junction points, but things to attach to a junction point, so C & D are wrong.

QUESTION NO: 49
Which is the purpose of channel services unit/data services unit (CSU/DSU)?

A.   A CSU/DSU is a device that enables a computer to communicate with other computers over telephone lines by translating digital audio/analogue signals then bag into digital forms.
B.   A CSU/DSU is a device that converts one protocol stage to other.
C.   A CSU/DSU is a device that directs the flow of information from one node to another.
D.   A CSU/DSU is a device that terminates physical compliance connection.

Answer: D.
Explanation: the CSU/DSU is used at both ends of a digital line to provide a transmission medium for data transmission. The computer communicates in a digital-to-digital mode. Digital to Analog is the function of a modem, and although the CSU/DSU would be placed at the ends of the communications medium like a modem, CSU/DSU units are for digital communications, so A is wrong. A CSU/DSU does not convert protocols, so B is wrong. CSU/DSU are used in point to point connections, so there is no need to direct data flow, so C is wrong.

QUESTION NO: 50
Gorge notices that it takes more time for web pages to load on his browser than it takes on his coworker browsers. They both visit the same web site frequently. But Gorge reloads the images each time he visits the site. How can gorge increase the speed of image loading?

A.   Enable image loading on the browser.
B.   Increase the size of the browser cache.
C.   Stop the browser then restart it.
D.   Clear the browser history.

Answer: B.

Explanation: if Gorge is reloading the images each time he revisits the site, then the old images can't be found. This can occur if the cache is too small. What happens is that as new sites are visited, if the cache is too small, the browser has to delete other objects to make room for the new ones, and the because things are too tight, recent objects have to be deleted. By increasing the cache, these objects have a better chance of still being in the cache when the website is visited again. Image Load has to be enabled, this is what is most likely slowing down the browser, so we rule out A. Stopping the browser and restarting it will have no effect on the cache, or make it worse if the delete all content on browser close if selected, so C is wrong. Clearing the browser history has no effect, it does not influence future visits to the website, so we rule out D.

QUESTION NO: 51
Which of the following best describes authentication?

    A.   Verification of the identity of a user who logons to a computer system.
    B.   A system that maps uniquely hierarchical names to specific Internet addresses.
    C.   The collection of hardware, software and corporate policies that protect a LAN from the Internet.
    D.   The protocol for transporting web pages across the Internet.

Answer: A.
Explanation: authentication is verification of who you are, and that you are who you present yourself to be. The definition in Answer B is the definition of a Domain Name Server (DNS), so B is wrong. Answer D defines the HTTP protocol, so D is wrong. Answer C defines the concept of a firewall, so C is wrong.

QUESTION NO: 52
Which connection medium operates at a maximum speed of 128KBPS?

    A.   ISDN line.
    B.   Ethernet.
    C.   T1 line.
    D.   T3 line.

Answer: A.
Explanation: ISDN, when running both channels of 64K can provide an aggregate of 128Kbps. Ethernet can run at 10/100/1000 Mbps, so B is wrong. A T1 line runs at 1.544Mbps, so C is wrong. A T3 line runs at 44.736Mbps, so D is wrong.

QUESTION NO: 53
As IT manager for a large company Tanga wants to implement frame relay between her company and business partner. What should Tanga do first?

A.   Make plans to lay a fiber optic and digital cabling that frame relay uses.
B.   Make plans to lease a T1 line for data transmissions.
C.   Make plans to lease FT1 line for data transmission.
D.   Contact the local telephone company to connect office to a frame relay point of presence.

Answer: D.
Explanation: Frame Relay can use most kind of media. Frame Relay is very fault tolerant. There would be no need to use fiber optic, T1 or FT1 connections. The telephone line would work fine.

QUESTION NO: 54
Which type of database manager system uses structured query language (SQL) to access it?

A.   Flat file.
B.   Hierarchical.
C.   Network.
D.   Relational.

Answer: D.
Explanation: SQL is a relation database. Network and Hierarchal are other database forms, but do not represent relation databases, so B & C are wrong. SQL is not a flat file, so A is wrong.

QUESTION NO: 55
Consider an HTML table cell that it defined by the following tag:
<TD COLSPAN=3 WIDTH="45">
How wide will this table cell be?

A.   The cell's width will be 3 columns.
B.   The cell's width will be 45% of the browser window.
C.   The cell's width will be 45 pixels.
D.   The cell's width will be 45 millimeters.

Answer: A.

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Explanation: The COLSPAN attribute with the value 3 will make the cell span 3 columns.
The width of the cell will not be 45% of the browser windows. The cell would be 45% of the width of the table (not B). The cell width will not be 45 pixels or 45 millimeters. It will span 3 columns and be 45% of the table's width.

QUESTION NO: 56
To create a hyperlink with a <A> tag. Which information must be included within the <A>?

    A.   The HREF attribute must be included within the <A> tag.
    B.   A Uniform Source Locator (URL) must be included within the <A> tag.
    C.   The name attribute must be included within the <A> tag.
    D.   The SRC attribute must be included within the <A> tag.

Answer: A.
Explanation: To define a hyperlink the anchor (A) tag must include the HREF attribute. For example:
<A HREF="URL">some text</A>

A URL is not required (not B). For example the following statement is correct and defines a name (bookmark) horses: <A NAME="horses">.

The NAME attribute is only included when a name (bookmark) is defined (Not C). The SRC attribute is used in the <IMG> tag but not in the anchor (A) tag.

QUESTION NO: 56
Johan included the following tag in the first line of his HTML file.
<!DOCTYPE HTML PUBLIC "-//WC3//DTD HTML 4.0 Transitional//EN">
Which of the following best describe the purpose of this tag in the Johan's file?

    A.   Johan included this tag for older browsers that do not understand HTML 4.0
    B.   This tag helps web browser process HTML 4.0 code more quickly.
    C.   This tag is required for HTML 4.0 compliance.
    D.   Johan included this tag as a comment.

Answer: C.
Explanation: The tag informs the browser (and any interested user) that the web page is HTML 4.0 compliant.

The tag will not help users with older browsers that don't support HTML 4.0 (not A). The tag will make the web browser to process the code more quickly (not B). This is not a comment tag (not D).

QUESTION NO: 57
Which of the following best defines the value portion of a HTML tag?

    A.   A value describes a certain aspect of an element.
    B.   A value provides the main instruction of an HTML tag.
    C.   A value is a required portion of a HTML tag.
    D.   The value describes the attribute of an HTML element.

Answer: D.
Explanation: Attributes has values. One view, which is used in this question, is to say that they value describes the attribute. For example: WIDTH=50. WITH is the attribute and 50 is the value.

Elements are the building blocks, the tags (Not A). The values or connected to attributes. Values are not used as instructions (not B). There are many HTML tags that doesn't require an attribute. For example: <BR>, <HTML>

QUESTION NO: 58
Which option does a browser software package typically allows you to customize after you install the browser software?

    A.   Operating system
    B.   Font/Text size
    C.   Advertising banners
    D.   Sound volume

Answer: B.
Explanation: font size is typically an option that you can change, which either can be used to help readability (larger fonts) or get more on a page (smaller fonts). The browser is independent of the OS, so A is wrong. You can't customize advertising banners, these are incoming graphics, and not under your control, so C is wrong. Sound volume is controlled by multimedia properties for the audio, and not under browser control, so D is wrong.

QUESTION NO: 59
Jenny frequently visits the web sites that often adds very new large images. She likes the content on the web site but is reluctant to continue visiting because it takes a long time to load the pages. What can Jenny do to solve this problem?

    A.   Increase the size of the browser cache.
    B.   Disable image loading on the browser.
    C.   Stop the browser than restart it.
    D.   Clear the browser history.

Answer: B.
Explanation: by disabling the loading of the images, the web page will load very fast. A good portion of loading a web page is the download of images, which can be large. Increasing the size of the browser cache would not help here, as these are new images and will still get downloaded. The bottleneck here is the bandwidth of the network connection to the website, and apparently it is a slow link. Increasing the cache will not speed up the download of the images, so A is wrong. Stopping the browser and restarting it has no effect, even if the process was turned on to clear the cache, because the bottleneck is the network, so C is wrong. Clearing the browser history also does not have an effect here, so D is wrong.

QUESTION NO: 60
What is the key difference between JAVA and JavaScript?

    A.   Java is more complicated scripting language intended for senior developers.
    B.   Java is an object oriented programming language whereas JavaScript is an object based scripting language.
    C.   JavaScript is more complicated language intended for senior developers.
    D.   JavaScript is an object oriented programming language whereas Java is an object based scripting language.

Answer: B.
Explanation: Java is a full programming language and JavaScript is a scripting language. Answer D says the reverse, so D is wrong. JAVA is not a scripting language, so A is wrong. JavaScript is a simpler language, so C is wrong.

QUESTION NO: 61
Which of the following best describes a cookie?

A.   A small text file created by a web server that resides on the users computer.
B.   An external application launched by a web browser or Internet client program to view non-native file formats and other data types.
C.   A file format used for importing and exporting graphics.
D.   A small program created in the Java language especially designed to reside in HTML pages.

Answer: A.
Explanation: web servers and web browsers do not have access to store data on your computer. Sometimes a website wants to leave an indicator that you have been there before. One common use is to save the userid of the person who last did a logon to the site, and maybe even the password. Then when you visit the site again, it knows you, and can even log you on. These files that are created are text files, and reside on the client's computer. It is not an application, so B is wrong. It could be considered a file format, in a loose way, but it is not involved with the import or export of graphics, so C is wrong. It is also not a program, so D is wrong.

QUESTION NO: 62
Everett is the IT manager for a medium sized company. Since the staff has grown from 150 to 300 employees he has noticed that the download time of web pages has increased significantly. Which is the best solution for Everett to decrease download time for web pages?

A.   Install a gateway server.
B.   Establish a policy encouraging employees to limit Internet usage.
C.   Install a proxy server.
D.   Install more effective virus protection.

Answer: C.
Explanation: installation of a proxy server can help. A feature of proxy servers, such as Microsoft Proxy Server and ISA Server 2000, is a cache mode. In cache mode, the proxy server caches the pages and elements that are then passed to the user's browser. This of course will work and show improvements subject to the following restrictions: Many of the 300 users need to be hitting the same web pages, and the TTL on those web pages need to be long enough so that don't expire quickly. Now this can be achieved, especially with 300 employees, but keep in mind that just throwing a proxy sever in there does not guarantee a solution. A gateway server does not provide any means to reduce traffic over the link, so A is wrong. Having employees limit usage would only work in theory. Can the employees limit usage? If they are only doing company business and not personal business, then there is nothing that can be cut. Limiting usage may or may not produce results, but in either case it is not the best solution, so B is wrong. Installation of more effective virus protection will not make the downloads faster, the slowness of the downloads is due to network congestion, like overloading a T1 line beyond its capable bandwidth, so D is wrong.

QUESTION NO: 63
Which of the following is a top-level domain in the United States?

    A.   net
    B.   mx
    C.   mart
    D.   CA

Answer: A.
Explanation: net is a US root domain, and is usually for Internet providers, but this usage has not been enforced. Mx and Mart are not high order domains at all, so B & C are wrong, and CA is the root domain for Canada, so D is wrong.

QUESTION NO: 64
Which type of the following is a characteristic of Screened Subnet firewall Demilitarized Zone?

    A.   All traffic passes through the bastion that filters packets then forward them to the company.
    B.   One company that exposes as firewall component and network interface.
    C.   All publicly accessible devices include modem pools and other resources are placed in secure isolated network.
    D.   Hackers can never defeat this type of firewall.

Answer: C.
Explanation: the DMZ is formed by having two firewalls, one between the Internet and the DMZ, and another between the DMZ and the private network. All servers requiring access by both the Internet and intranet are placed there, along with modem pools and other methods of external access. It is very hacker resistant, but hackers are cleaver, and anything can be broken, so D is wrong. There are no bastion hosts involved here, access to any server requires passing though a firewall, from either direction, so A is wrong.

QUESTION NO: 65
What is the purpose of a switch?

    A.   A switch is a device that enables a computer to communicate with other computers over telephone lines by translating digital data into audio/analogue signal, and then back into digital form.
    B.   A switch is a device that converts one protocol stack to another.
    C.   A switch is a device that directs the flow of information from one node to another.

D.   A switch is a device that terminates physical connections.

Answer: C.
Explanation: a switch is a multiport device that controls data flow from one port to another. Although broadcasts are sent to all ports, directly addressed frames are only sent to the port that has that address, and all other ports do not see that traffic. This provides both performance and security advantages, as a device on a port cannot see anyone else's non-broadcast traffic. Answer A is the definition of a modem, and is wrong. Switches only move data, they do not change or convert the data, and so B is wrong. Answer D is also wrong.

QUESTION NO: 66
Ingrid, a manager, wants a server that she can automatically send e-mail messages to every member of the department. Which type of server should Ingrid recommend?

A.   A proxy server.
B.   Mailing list server.
C.   Media server.
D.   News server.

Answer: B.
Explanation: a mailing list server will maintain the list of email addresses so that the message can be routed to multiple recipients. A proxy server is used for caching and firewall type of protection, and does not do this function, so A is wrong. A media server is used to send streaming audio and video, and not mail, so C is wrong. A news server is for discussion groups, and is not directed to particular users, as required in this problem, so D is wrong.

QUESTION NO: 67
Which e-commerce protocol is defined as a standard protocol used on the Internet to secure online credit card payments?

A.   Electronic Data Interchange (EDI)
B.   Secure Electronic Transactions (SET)
C.   Open Buying on the Internet (OBI)
D.   Hypertext Transfer Protocol (HTTP)

Answer: B.
Explanation: SET is a standard protocol to secure online credit card purchases.

EDI is the unambiguous exchange of business information between two or more independent computer systems using a common format and syntax (not B).

The Open Buying on the Internet (OBI) standard is an open, flexible design for business-to-business Internet commerce solutions. The OBI standard seeks to support business-to-business electronic commerce. It isn't specifically used to secure online credit card payments (not C).

HTTP is a client-server protocol by which two machines can communicate over a TCP/IP connection. HTTP is the protocol used for document exchange in the World-Wide-Web (not D).

QUESTION NO: 68
Lars is very interested in soccer but he does not have enough time to actively research current events in the soccer world. What is the best way for Lars to learn about current events?

    A.   Subscribe to a mailing list that sends an update any time a newsworthy event occurs in the soccer world.
    B.   Search news groups everyday to learn about newsworthy events in the soccer world.
    C.   Visit web sites everyday to learn about newsworthy events in soccer.
    D.   Create a web site that allows people to post their opinions about soccer.

Answer: A.
Explanation: Lars wants to learn about current events, so he needs to get a hold of articles that are newsworthy and related to soccer. By subscribing to a mailing list server for that topic, we will get those articles when they appear. This saves Lars the time of searching and having to look for this information. Searching newsgroups is time consuming, and information can be missed. New Groups are a discussion forum, so the topics can be extensive with many posts and a lot of information to sift through, filter and analyze, which Lars has no time for, so B will be ruled out. Visiting web sites is also search intensive, and would take too much of Lars time, so we rule out C. Having a web site may get people's opinions, but there is no guarantee that anyone will post there, and it does not insure that he will get all the latest news and information, so we rule out D.

QUESTION NO: 69
Which component is absolutely necessary in order to connect to the internet?

    A.   TCP/IP
    B.   A network interface card (NIC)
    C.   An e-mail client
    D.   A direct connection.

Answer: A.
Explanation: the Internet runs TCP/IP protocol, so this is absolutely necessary. A NIC is not necessary, many users connect up via a modem, and so B is wrong. E-Mail is not required to use the Internet, so C is wrong. Very few users have a direct connection (other than DSL), and a direct connection is not required, so D is wrong.

QUESTION NO: 70
Amid is troubleshooting his network and needs to determine the path between a source and destination computer. Which is the best network diagnostic tool for Amid to use to find the path?

    A.   Ping
    B.   Tracert
    C.   Netstat
    D.   Ipconfig

Answer: B.
Explanation: tracert will provide the path to the destination computer. It uses ICMP, and sets the parameters of the ICMP so that the hop count is low. The ICMP fails because it can't reach the destination – due to the hop count being exhausted, so the failed ICMP returns the last hop that was successful. It then continues bumping up the count until all hops are identified along the path to the destination. The ping command will let you know if you can get to the destination computer, but provides no information of the path traveled, so A is wrong. Netstat and IPConfig are commands that display internal tables within the source machine, and do not provide path information nor is able to even show that the destination can be reached, so C & D are wrong.

QUESTION NO: 71
You want to write a script that will perform a series of operations that use the results to take specific actions. Your company's-worker recommends that you use a Java servlet instead of a CGI script. What is the advantage of using a servlet in this situation?

    A.   CGI scripts are used mainly for database access, they do not perform other actions as effectively.
    B.   A Java servlet allows servlet chaining which allows the output from one servlet to go to another.
    C.   CGI scripts are proprietary may not execute correctly in certain web browsers.
    D.   The Java servelts are not compiled so they run faster.

Answer: B.

Explanation: Chaining is a better design, one servelet could perform the series of operations and then chain down to a servelet to perform the actions. CGI scripts could be written to do this, they are not specifically designed for databases, but may take longer to develop, test and debug, and have security implications so A is wrong. CGI scripts are open, not propriety, so C is wrong. Java servelets are interpreted, not compiled, so they run slower, so D is wrong.

QUESTION NO: 72
The ICANN assigns your company the network address 206.57.26.0 Which address can you use for the default subnet mask?

A. 255.255.0.0
B. 255.255.255.255
C. 255.0.0.0
D. 255.255.255.0

Answer: D.
Explanation: this is a class C subnet mask, and 206 is a Class C address. Class C address have a first octet of 192-239, and 206 is in there. 255.255.0.0 is a Class B subnet mask, and since the 206 address is Class C, A is wrong. 255.0.0.0 is a Class A subnet mask, so C is wrong. And 255.255.255.255 does not indicate subnetting at all, so B is wrong.

QUESTION NO: 73
Eduardo is buying from his favorite online store and notices that the URL for the store changes to http://store.myfavorite.com when he enters the merchandising section. What is most likely reason for this?

A. The URL is an example of a second level domain.
B. This URL is an example of first level domain.
C. This URL is an example of sub domain.
D. The name of the server on which the company keeps its merchandising content is store.

Answer: D.
Explanation: Most likely when the merchandising section was entering, he was transferred to another server, and that server is known as store. The URL is not an example of a first, second or sublevel domain name, so A, B & C are wrong.

QUESTION NO: 74
Hermoine notices that she is the only person in her department who can't create files on the department file share. However she can view the files that others have created. What should Hermoine do?

A. She should ask her network administrator to allow her execute access on the directory in which the file share resides.
B. She should ask her network administrator to allow her full access on the directory in which the file share resides.
C. She should ask her network administrator to allow her write access on the directory in which the file share resides.
D. She should ask her network administrator to allow her read access on the directory in which the file share resides.

Answer: C.
Explanation: she needs write access to create files on the server. Having execute access has no effect, execute access allows a program or script to be executed, but she wants to write and execute does not provide that, so A is wrong. She can ask for full access, but a Network Administrator most likely isn't going to give it to her, as it is too much authority to give to the user, so B is wrong, it won't happen. Since she can read other user's files, she already has read access, so adding it doesn't help, and read does not allow write to create files, so D is wrong.

QUESTION NO: 75
Which of the following is a function of a firewall?

A. Identifying DNS servers for the DNS domain.
B. Maintaining a routing information table.
C. Providing symmetric key encryption services.
D. Filtering packets.

Answer: D.
Explanation: a firewall filters packets, restricting traffic into and out of the local network. This can be controlled by various parameters, such as protocol, port number, and ip addresses. The first firewalls were routers that implemented packets filters, and have become more supplicated that programs running on servers are implemented as firewalls, as the filtering rules have become more complex and beyond the router's capabilities. A firewall does not identify DNS server, nor maintain a routing information table, so A & B are wrong. A firewall is also not a key server, so C is wrong.

QUESTION NO: 76
According to the HTML 4 recommendation an html tag can consist of several items. All of which are contained within angle brackets (<and>). The main instruction of an html tag is usually contained in which item?

    A.   Element.
    B.   Attribute.
    C.   Value.
    D.   Code.

Answer: A.
Explanation: The main item is called element. Inside an element there could be attributes and values of attributes. Code is supplied in script elements.

QUESTION NO: 77
Which statement about the GIF and JPEG file formats is true?

    A.   Both file formats support image compression.
    B.   Both file formats can support a maximum of 255 colors in one image file.
    C.   Both file formats are supported in current web browsers.
    D.   Both file formats support transparency.

Answer: C.
Explanation: GIF and JPEG are common to most web browsers today, and can be handled and displayed by them without additional software. GIF does not support compression, so A is wrong. JPEG can support more than 255 colors in an image, so B is wrong. GIF does not support transparency, so D is wrong.

QUESTION NO: 78
What is a home page in Netscape navigator and Microsoft Internet explorer?

    A.   Personal web page that you maintain on your server.
    B.   A default location that the web browsers loads when you start the browser.
    C.   The web site you visit most often.
    D.   The web site of the company that sold you the computer.

Answer: B.
Explanation: You specify for the home page the first page that the browser opens when the browser starts. Now you can point that URL to a personal web page, to the company that you sold you the computer or the web site you visit often, but these are NOT made your home page unless you explicitly point the home page to one of those sites. SO, A, C & D are wrong.

QUESTION NO: 79
Helga is the IT manager of a small company. One of her employees complaints that he can't access his own e-mail account at work. Helga explains the reason for this. Which of the following options is the most likely explanation?

    A.   The employee's e-mail account receives inappropriate messages and is restricted from the network.
    B.   Home e-mail accounts are most likely to receive viruses than business accounts.
    C.   The corporate firewall is blocking access to the employees home e-mail account.
    D.   The employee has configured the e-mail account incorrectly.

Answer: C.
Explanation: to access the email account will usually require accessing a POP3 server (or maybe a IMAP4 server) outside the corporate net. These protocols or ports are usually blocked by the firewall, and for a secure company may be blocked both ways, i.e. you can't get personal mail from work and you can't get business mail at home. The Answers provided in A & B do not reflect what is most likely happening, so A & B are wrong. However they do reflect some of the reasons why a company will close those ports on the firewall and disallow access. Although a bad configuration is likely, it is not most likely since most companies block access at the firewall making C a better choice and D is wrong.

QUESTION NO: 80
You are a project manager in charge of a project to launch an e-commerce site. One team member repeatedly implements additions to the site that do not comply with the original design specifications. Which of the following best describes this situation?

    A.   The team member is introducing scope creep
    B.   The team member is contributing valuable information that was omitted from the original specifications
    C.   The team member is helping to pilot the project
    D.   The team member is helping to develop the e-commerce site

Answer: A.
Explanation: Scope creep occurs when the initial goals of a project gradually increase as the project is being implemented as is the case in this scenario. The team member is introducing scope creep. Most likely he is not contributing valuable information (not B).

The specification should be followed as the first priority. It would be better to change the specification and then introduce new features. The project would not benefit of individual initiatives that are outside the specification (not C, D).

QUESTION NO: 81
Which of the following is an example of "poor netiquette"?

    A.   Typing in all capital letters.
    B.   Using formal salutation.
    C.   Failing to use a signature file.
    D.   Writing long e-mails.

Answer: A.
Explanation: typing in all caps is considered shouting. Now writing long e-mails may also be considered poor netiquette, so we rule out D, but the concept of all caps applies to other communications besides e-mails, such as forum posts, filling out surveys, posting to newsgroups, and the use of instant messenger systems. Formal salutation is ok and a signature file is not necessary, so we rule out B & C.

QUESTION NO: 82
Which of the following best describes an intranet?

    A.   A TCP/IP-based network that belongs to an organization, usually a corporation, accessible only by the organization's members and employees.
    B.   A worldwide network, available to anyone who has a TCP/IP connection on a computer.
    C.   An external communication mechanism intended to share information with suppliers and external venders.
    D.   An internal repository to hold company documents.

Answer: A.
Explanation: an intranet is an internal Internet, for the internal organization. It is a network, and not a repository, although a repository server could be attached to the intranet, it does not define the intranet itself, so D is wrong. Answer B is the definition of the Internet, and most intranets block out connectivity through

firewalls. Some intranets are not even connected to the Internet. So B is wrong. Answer C defines another network type, called an Extranet, so C is wrong.

QUESTION NO: 83
Which of the following is the best way to test which portions of your web site are popular?

    A.   Install a hit counter for each page on your site.
    B.   Conduct an online survey asking visitors which portions of the site they prefer.
    C.   Sending e-mail messages to site visitors asking them to tell which portions of the site are most useful.
    D.   Write a custom application that customizes the site to visitor preferences.

Answer: A.
Explanation: by using a hit counter, you can see how many times a page was hit and loaded into someone's browser. The higher the hit counter, the more popular the page. Online surveys will not provide much input. Hit counters are passive, no one really has to do anything. Surveys are active, you expect the user to actually do something, and not too many users have time to Answer surveys. And suppose you have 1000 pages on your site, how are you going to survey which ones are popular? B & C are wrong because they just are not practical. Writing a custom application may make the website difficult to use, because now you are forcing the user to create an ID and specify those preferences, as well as the programming that has to be done, and although doable, not considered the best way to get this information, so we rule out D.

QUESTION NO: 84
Which link is an example of a protocol designed specifically to download and upload files?

    A.   http://www.filedownload.com
    B.   gopher://gopher.filedownload.com
    C.   ftp://ftp.filedownload.com
    D.   mailto:filedownload@filedownload.com

Answer: C.
Explanation: ftp – File Transmission Protocol is used for file upload and download. HTTP provides download of files, but is not designed specifically to do that, it is just an extra feature, and so A is wrong. Gopher, like HTTP provides the listing of text pages as it basic function, not file transfer, so C is wrong. Mailto is a mail function, for sending e-mail, so D is wrong.

QUESTION NO: 85
Which of the following best describes an e-mail signature file?

A. Several lines of text that are automatically inserted at the end of each message.
B. A virtual business card attached to a message that lists the senders contact information.
C. The senders name and title type manually at the end of each message.
D. An HTML file that is sent automatically with each message.

Answer: A.
Explanation: a signature file contains test that is appended. This text could be anything that you want stamped on every message. Some people will use contact information, but some companies require that a confidential non-disclosure statement be used to protect from liability. It is just text. It may contain a virtual business card as part of the signature, but this is not the definition of the signature itself, so B is wrong. The signature is a file of the information pretyped, saved, and appended to each message, not manually typed each time, so C is wrong. The signature file is text, so D is wrong.

QUESTION NO: 86
Peter is attempting to buy a product from a web site. He notices that when he clicks the button to summit his order he receives a message that reads *any information you submit is not secured and could be observed by a third party while in transit*. Which is the best solution for peter to recommend to the site Webmaster to ensure transaction security?

A. Peter should recommend that the site install Microsoft Windows NT security and require each person visiting the site log on with the user name and password.
B. Peter should recommend that the site install a secure sockets layer SSL key to encrypt data between the browser and the sites server so data can't be intercepted.
C. Peter should recommend that the site post a message stating that all transactions are secure.
D. Peter should recommend that the site advice visitors to lower their security settings.

Answer: B.
Explanation: by setting up the SSL, and using HTTPS:// the communications will be encrypted and secure. The data can still be intercepted, but no one will be able to make any sense of it unless they have the keys, which they won't. Using NT security has issues, but the easiest to explain is that being properly authenticated does not provide secure connections. The web pages still go over the network as clear text and can be intercepted, so A is wrong. Posting that the messages are secure does not make them secure, so C is wrong. Change of security settings does not secure the data, anyone snooping the line can still intercept the pages and steal the data, and so D is wrong.

QUESTION NO: 87
Rod is attempting to buy a product from a web site. He notices that when he clicks the button to summit his order he receives a message that reads read *information you submit is not secured and could be observed by a third party while in transit*. Which is the best solution for Rod to recommend to the site Webmaster to ensure transaction security?

    A.   Microsoft Windows NT username and password security.
    B.   SSL key protection to encrypt data between the browser and the site's server.
    C.   A message stating that all transactions are secure.
    D.   A message advising visitors to lower their security settings.

Answer: B.
Explanation: this is a duplicate of question 90, although the name is different, the questions are almost the same. So here was the Answer to 90:

Answer: B, by setting up the SSL, and using HTTPS:// the communications will be encrypted and secure. The data can still be intercepted, but no one will be able to make any sense of it unless they have the keys, which they won't. Using NT security has issues, but the easiest to explain is that being properly authenticated does not provide secure connections. The web pages still go over the network as clear text and can be intercepted, so A is wrong. Posting that the messages are secure does not make them secure, so C is wrong. Change of security settings does not secure the data, anyone snooping the line can still intercept the pages and steal the data, so D is wrong.

QUESTION NO: 88
Which FTP command should you enter to download a file named superfile .txt from your company's FTP site?

    A.   Put superfile.txt
    B.   Open superfile.txt
    C.   Ls superfile.txt
    D.   Get superfile.txt

Answer D.
Explanation: to download a single file, the GET command is used. The PUT command is used to upload a file, so A is wrong. The command OPEN is used to open a particular FTP site, so B is wrong. The command LS is the Unix form of the command used to list the directory contents, so C is wrong.

QUESTION NO: 89

You want users to be able to find your web site if they enter the words: "CIW certified" into a search engine. Which tag demonstrates the proper syntax you should use in a <META> tag to embed this information in your web page?

A. <META KEYWORDS= "CIW certified">
B. <META CONTENT=keywords: "CIW certified">
C. <META= "search engine" KEYWORDS= "CIW certified">
D. <META NAME= "keywords" CONTENT= "CIW certified">

Answer: D.
Explanation: The correct syntax of the META statement to provide keywords for search engines is:
<META NAME= "keywords" CONTENT= "different words are entered here">

Both the NAME="keywords" and the CONTENT=" different words are entered here" must be present.

QUESTION NO: 90

Two computer systems interact. Later, the first system has no proof that any transaction took place. The second system provides proof of the transaction. Which term describes the security measure employed by the second system in this transaction?

A. Data integrity
B. Authentication
C. Access control
D. Nonrepudiation

Answer: D.
Explanation: Nonrepudiation is when one party to the transaction can actually prove that the transaction occurred. Data Integrity is a process where the receiver of the message can be assured that the message contents was not altered by any third party, and is in fact the data from the original sending party. This process uses a combination of checksums and digital signatures, such as a message digest, a common coding scheme is MD5. Authentication is the process of being able to identify the other party and to be assured that that party is in fact who you believe they are. The earliest form of authentication was a password, a secret shared between you and the other party that only you two knew the secret and no one else. Since passwords are easily breached and cracked, more sophisticated means of authentication have been developed to make breaching difficult or impossible. Access Control is a method of putting controls on resources, such as data, to control who can or

cannot access the data. Authentication insures that the person is who they say they are, access controls determines which resources the authenticated person may access. A, B & C are wrong.

QUESTION NO: 91
The OSI/RM describes five security services. One of them allows you to prove that a transaction occurred. Which one of the following services provides that proof?

A. Authentication
B. Nonrepudiation
C. Encryption
D. One-way hash

Answer: B.
Explanation: Nonrepudiation services are designed to prevent a party involved in a communication or transaction from later denying having been a participant.

Authentication is used to initiate communication. Authentication isn't used during transactions (not A). Encryption makes the data unreadable for third parties but encryption isn't used to keep track of transactions (not C). One-way hashs are not used specifically in transactions.

QUESTION NO: 92
Which protocol is used at the application layer of the Internet architecture model?

A. Transmission Control Protocol (TCP)
B. Hypertext Transfer Protocol (HTTP)
C. Address Resolution Protocol (ARP)
D. Internet Protocol (IP)

Answer: B.
Explanation: HTTP is an application layer protocol, it is the protocol that Web Browsers run. The application layer is layer 7, the highest layer in the ISO Model. TCP is a transport layer protocol, operating at layer 4, so A is wrong. ARP is used to find a MAC address for an IP address, and operates at the Network layer, layer 3, so C is wrong. IP is also a network layer protocol, operating at layer 3, so D is wrong.

QUESTION NO: 93
Marielle is thinking about buying a File Transfer Protocol (FTP) application, but she wants to try it first. How can Marielle test an FTP application before purchasing?

    A.   Download an illegal software application
    B.   Download a shareware software application, if one exists
    C.   Send e-mail to the vendor and ask it for a sample copy
    D.   Borrow the application from one of her friends to try out

Answer: C.
Explanation: vendors will usually provide a sample or evaluation copy of software for users to try out first, before purchase. This is probably the safe way to obtain and test the software. A download of an illegal copy of the software is a violation of copyright laws, is unethical, and depending on where the copy is retrieved, may be implanted with viruses and a trojen horse, so A is wrong. Downloading a shareware version can is similar to getting an evaluation copy of the software, but if the shareware version is not obtained directly from the vendor, it could be subject to the same security risks (viruses) as using illegal versions of the software, so we rule out B. Borrowing the software, is usually illegal, although it might not pose the same threats, but is still illegal, and so D is wrong.

QUESTION NO: 94
Which IP class uses 16 bits for the network portion and 16 bits for the host portion of the address?

    A.   Class A.
    B.   Class B.
    C.   Class C.
    D.   Class D.

Answer: B.
Explanation: a Class B IP address is 16 Network, 16 Host. A class A address is 8 Network and 24 Host, and a Class C is the opposite, 24 network and 8 host, so A & C are wrong. The Class D is the multicast range, and does not use a network/host format, so D is wrong.

QUESTION NO: 95
Which protocol operates at the transport layer of the OSI reference model?

    A.   Internet Protocol (IP)
    B.   Ethernet

C.   Transmission Control Protocol (TCP)
D.   Hypertext Transfer Protocol (HTTP)

Answer: C.
Explanation: TCP runs at the Transport Layer, Layer 4. IP runs at the Network Layer, Layer 3, so A is wrong. Ethernet is a physical medium transmission protocol, which runs at Layer 1 – the Physical Layer, so B is wrong. HTTP is an application layer (Layer 5) protocol, so D is wrong.

QUESTION NO: 96
Reiko has noticed that she cannot see any images when she visits her favorite web sites. How can she correct this problem?

A.   Notify the site webmasters that all their images are faulty
B.   Enable image loading on her browser
C.   Download a browser plug-in that enables her to see images
D.   Restart her browser

Answer B.
Explanation: most likely the image loading feature on the browser is disabled, and needs to be turned on. Although faulty images can be responsible, it is unlikely that all the images are bad, so we rule out A. It is also unlikely that propriety images are being used that would require a plug-in, although this could be possible, it is usually unlikely, so we rule out C. A restart of the browser, without changing any options or parameters will have no effect, when the browser starts up, the images will still not load, so D is wrong.

QUESTION NO: 97
Thomas frequently visits a web site using a dial-up connection. He likes the content on the web site, but he is reluctant to return because it takes a long time to load the images. How can Thomas solve this problem?

A.   Close the browser, then reopen it
B.   Disable image loading on the browser
C.   Decrease the size of the browser Window
D.   Decrease the size of the browser's text font

Answer: B.

Explanation: the process that consumes a great deal of bandwidth is the loading of images. If the image loading is disabled on the browser, then a good portion of the page loading process is eliminated, and the web page load made quicker. Closing the browser and then reopen it will have no effect on the speed of loading images, so A is wrong. Changing the size of the browser windows or font does not affect the bandwidth of moving data along the dial-up, and therefore does not relieve the contention on the line, so C & D are wrong.

QUESTION NO: 98
Which of the following is an example of a top-level domain?

    A.   www.ciwcertified.com
    B.   http://
    C.   63.72.51.85
    D.   .org

Answer: D.
Explanation: .org is a high level root domain. Answer A is the example of a fully qualified Domain Name, and is not a top-level domain, so A is wrong. Answer B shows the protocol identifier for specifying the HTTP protocol, so B is wrong. And C shows an IP address, which is not a name or part of the domain naming hierarchy, so C is wrong.

QUESTION NO: 99
Which scenario describes a back-end issue you must consider when developing a web site?

    A.   Your web site is easy for users to navigate because it uses familiar conventions and contains no dead ends
    B.   Your home page presents a lot of small text explaining your company in detail, but no images and no colors other than back and white.
    C.   Your web site contains a lot of images so it is visually exciting but it takes a long time to download each page, even with high-speed connections
    D.   Your site uses the most current design trends available, to present exciting content considered fashionable by your target audience

Answer: C.
Explanation: Back-end issues is another word for server issues, or more precisely web servers issues. This issues include bandwidth, download time and server load. A web page with a lot of images would be a back-end issues since the web site of the web server could become a network bottleneck.

Easy of use (not A), text describing your company and lack of images (not B) are not back-end issues. Keeping the site up to date with the current design trends could be a back-end issue since modern technologies could increase the server load. However download time is a more crucial factor (not D).

QUESTION NO: 100
You are caching a web site using frames to define structure. Which tag allows you to specify default target frame for all the links in your file?

    A.   <HREF= www.url.comTARGET="default">
    B.   <BASE HREF= "www.url.com" TARGET="main">
    C.   <TOP TARGET= "default">
    D.   <TARGET= "top" HREF= "ww.url.com">

Answer: B.
Explanation: The <BASE> tag is used to target all links within a frame to a particular frame.
The default target frame cannot be specified by a HREF tag, a TOP TARGET tag, or a TARGET tag.

QUESTION NO: 101
Which protocol allows you to send e-mail messages from your computer?

    A.   Internet Message Access Protocol (IMAP)
    B.   Hypertext Transfer Protocol (HTTP)
    C.   Simple Mail Transfer Protocol (SMTP)
    D.   Post office Protocol (POP)

Answer C.
Explanation: SMTP allows the sending of mail messages. IMAP and POP are used to receive e-mail messages, not send, so A & D are wrong. HTTP is the protocol used for WEB Pages, and is not a mail protocol, so B is wrong.

QUESTION NO: 102
Which of the following is an advantage of smartcards?

    A.   They are widely used
    B.   The use magnetic stripes to store data

C.   The have the ability to hold much more data types than other types of cards
D.   They are much larger than other types of cards

Answer C.
Explanation: smartcards use a computer processing chip with onboard memory, capable of handling more memory capacity than magnetic striped cards, which are common to today's credit cards. Smartcards are being distributed for various purposes, such as in credit cards (American Express Blue), but have not reached the point of widespread use, so A is wrong. Computer chips are used to store data, so B is wrong. Since the computer chip is small, smartcards can be made small or at least the same size as other cards, so D is wrong.

QUESTION NO: 103
Which common network component operates at the network layer (Layer 3) of the OSI reference model?

A.   Router
B.   Bridge
C.   Repeater
D.   Hub

Answer: A.
Explanation: the router runs at the network layer, layer 3. A bridge runs at layer 2, which is the Data Link Layer, so B is wrong. A repeater and Hub run at the physical level, layer 1, so C & D are wrong.

QUESTION NO: 104
Sylvie is creating an HTML table. She wants more space between the cell text and the cell borders. Which table attribute would best accomplish this task?

A.   CELLSPACE
B.   CELLPADDING
C.   CENTER
D.   ALIGN

Answer: B.
Explanation: The CELLPADDING attribute is used to control the space between the cell border and the text. CELLSPACING is used to control the distance between cells (not A).

CENTER centers the text. This will not increase the space between the text and the vertical borders in the cell (not C). ALIGN adjusts the text in the cell. It doesn't change the space between the cell text and the cell borders (not D).

QUESTION NO: 105
Sally created a form that will collect data for a marketing survey. She configured the ACTION attribute with a CGI pointer. In order to correctly process this form, where must the CGI script reside?

    A.   On the user's computer
    B.   In a cookie file
    C.   In the browser
    D.   On the server

Answer: D.
Explanation: CGI scripts are server-side scripts. Server side scripts are run at the server. They cannot be run from the client, from a cookie file or in the browser.

QUESTION NO: 106
Which of the following is an example of a browser plug-in?

    A.   Any Java application
    B.   A Telnet client
    C.   Netscape messenger
    D.   Abode Acrobat Reader

Answer: D.
Explanation: Acrobat Reader provides a plug-in that allows displaying of a PDF document in the web browser screen. A JAVA application can be run as a program, and can be used to write a plug-in, but does not represent any particular plug-in by name, or may be used for other tasks other than a plug-in, so we cannot say ANY JAVA application, so A is wrong. A Telnet client is not run in a browser window, so B is wrong. Netscape messenger is not a plug-in, it is a feature of Netscape and does not run as part of the browser, so C is wrong.

QUESTION NO: 107
Which of the following best describes a digital certificate?

A.   The equivalent of an ID card that proves the identity of an individual or company over the web
B.   A standard browser feature that secures the user's identity from hackers
C.   A security mechanism used by web sites that requires a user name and password to log onto the site.
D.   The receipt that accompanies an online transaction verifying the purchase

Answer A.
Explanation: the digital certificate contains information that proves the identity of the individual, and is usually done using encrypted data in a PKI envirnonment. It is not a browser feature, although a browser can process the certificate, so B is wrong. Digital Certificates can authenticate a person's identity without the use of userids and passwords which could otherwise be easily breached, so C is wrong. And the DC is not a transaction receipt, so D is wrong.

QUESTION NO: 108
Which connection medium operates at a maximum speed of 1.544 Mbps?

A.   ISDN line
B.   Ethernet
C.   T3 line
D.   T1 line

Answer: D.
Explanation: a T1 runs at 1.544Mbps. An ISDN line runs at the maximum of 128Kbps, Ethernet can run as high a 1000Mbps (giga-ethernet), and a T3 line runs at 44.736Mbps, so A, B & C are wrong.

QUESTION NO: 109
What is the purpose of the session layer (Layer 5) of the OSI reference model?

A.   Establish, manage and terminate connections
B.   Forward and route datagrams to their destinations
C.   Interface with the end user
D.   Provide reliable transparent transport between source and destination hosts

Answer A.
Explanation: as stated. Answer B describes the Network Layer (Layer 3), Answer C describes the Application Layer (Layer 7), and Answer D describes the Transport Layer (Layer 4), so B, C & D are wrong.

QUESTION NO: 110
Which IEEE 802-series local area network (LAN) standard is a broadcast communication system that supports a data transmission rate of 10 Mbps and uses the CSMA/CD access method?

    A.   Ethernet
    B.   Fast Ethernet
    C.   Token ring
    D.   Fiber distributed data interface (FDDI)

Answer A.
Explanation: Ethernet is a 802.3 specification, running at 10Mbps. Fast Ethernet is an extension of the 802.3 specifications, but runs at 100Mbps, so B is wrong. Token Ring and FDDI are 802.5 Specifications, which use token passing, a different access method than CSMA/CD, Token Ring runs at 4, 16 or 100Mbps, FDDI runs at 100Mbps, so C & D are wrong.

QUESTION NO: 111
You passed your college final exams and earned a degree in history. Now you want to publish a web page that helps other college students effectively study for their final exams. What information can you legally post on your web site without committing copyright infringement?

    A.   You can publish historical facts that were tested on the exams as long as you express them in your own words
    B.   You can publish text that you copied from books assigned in your courses because the historical facts described in the copied txt are public domain
    C.   You can publish the exam questions exactly as you saw them worded on the final exams because you now have a history degree from that college
    D.   You cannot publish a web page that even mentions your college history exams unless you are an employee of the college

Answer: A.
Explanation:
As long as you express the historical facts in your own words you will not commit any copyright infringement.
The collage cannot have copyright on the historical facts (not D).
Copying text from books would break the copyright of the book (not B).
The exam questions are the property of the collage and shouldn't be published on the web site (not C).

QUESTION NO: 112
Which of the following is one of the original top-level domains?

    A.   .tv
    B.   .au
    C.   .gov
    D.   .ca

Answer: GOV
Explanation: is for government agencies. AU & CA are country specific top-level domains, so B & D are wrong. TV is a new top-level domain that was just created within the past year, so A is wrong.

QUESTION NO: 113
You want to create a hyperlink on your web page that links to another page on your site. You want users to click either the star.jpg image or the text next to the image to access the BigStars.htm page. Which HTML tag will create the hyperlink that you want on your web page?

    A.   <HREF= "www.BigStars.com" IMG= "star.jpg"> Go to Big Stars</HREF>
    B.   <A HREF= "BigStars.htm"><IMG SRC="star.jpg"> Go to Big Stars</A>
    C.   <LINK= "BigStars.htm"><IMG="star.jpg"> Go to Big Stars</LINK>
    D.   <A HREF= "www.BigStars.com" IMG= "star.jpg"> Go to Big Stars</HREF>

Answer: B.
Explanation: Both the IMG tag and the text must be included within the Anchor (A) tag. The anchor tag must start with <A HREF=" (not A, C). The IMG tag is used as: <IMG SRC="picture.xxx"> (not A, D).

QUESTION NO: 114
Which hardware device's only function to amplify an electronic signal?

    A.   A repeater
    B.   A network interface card
    C.   A bridge
    D.   A router

Answer: A.

Explanation: a repeater amplifies the electronic signal by repeating the signal. A NIC may power a signal, but does not amplify it. A NIC is also used for other tasks, such as transmitting and receiving data. The difference between a NIC and a Repeater is that the repeater amplifies an existing signal on the medium, where a NIC adds new signals to the medium, so B is worng. A bridge and router may pass frames/packets from one segment to another, and in a sense the signals are refreshed and can travel farther, but it is not the signal that is being refreshed and amplified, but the frames being passed form device to device. Connectors on Bridges and Routers are actually NICs, and a NIC itself is not a repeater. Bridges and Routers provide other functions than refreshing a signal, so C & D are wrong.

QUESTION NO: 115
Which choice describes a web page table formatting approach that you can use to convert your web content to comply with HTML 4.01 Strict?

    A.   Format an HTML table using the <PRE> tag with spaces and returns
    B.   Use an HTML table to structure your web page for frames
    C.   Use CSS instead of HTML tags to create table headers and rows
    D.   Use HTML table tags instead of the <PRE> tag to format tabulated text

Answer: C.
Explanation: XHTML 1.0 Strict is used when you want really clean structural mark-up, free of any tags associated with layout. Only Cascading Style Sheet language (CSS) is used for formatting. In this scenario this translates to replacing table formatting with CSS to create table headers and rows. HTML 4.01 Strict use CSS, not PRE tags with white space, to format tables (not A). HTML 4.01 strict doesn't use frames (not B). HTML 4.01 strict only allows CSS for formatting. HTML table are not used for formatting (not D).

QUESTION NO: 116
Which of the following is a country-code domain?

    A.   .org
    B.   .ch
    C.   .com
    D.   .edu

Answer: B.
Explanation: .ch which is Switzerland. (I was surprised too, I always thought it was China, but it isn't). Org is for organizational units, Com is for commercial sites, and Edu is for educational sites, such as Universities and Colleges, so A, C & D are wrong.

QUESTION NO: 117
Which protocol is an example of a transport-layer protocol that operates within the OSI/RM layers?

A.   Network File system (NFS)
B.   Internet Protocol (IP)
C.   Sequenced Packet Exchange (SPX)
D.   Simple Mail Transfer Protocol (SMTP)

Answer: C.
Explanation: SPX and TCP are examples of transport-layer protocols. NFS and SMTP are application layer protocol (not A, C), though they use the presentation and session layer as well. IPX and IP are network layer protocols (not B).

QUESTION NO: 118
SET and SSL are two protocols you might use if you are:

A.   sending e-mail messages that contain sensitive information
B.   running an e-commerce web site
C.   securing your corporate local area network
D.   designing a web page for your family

Answer: B.
Explanation: Secure Electronics Transactions (SET) uses Secure Sockets Layer (SSL) and Secure Transaction Technology (STT) to secure e-commerce transactions. SET is not used in e-mail, so A is wrong. SET is meant for the open Internet and may be overkill for just protecting internal intranet resources, so we rule out C. It would also be overkill for a family webpage, so we rule out D.

QUESTION NO: 119
JavaServer Pages (JSP), Active Server Pages (ASP) and Common Gateway Interface (CGI) are all examples of:

A.   client-side scripting technologies
B.   server-side scripting technologies
C.   database technologies

D.   application programming interfaces

Answer: B.
Explanation: JSP, ASP and CGI are all examples of server-side scripting (B). JavaScript is an example client-side scripting. JSP, ASP and CGI cannot be used at the client (not A). JSP, ASP and CGI scripts can be used to access databases, but they are not database technologies (not C). JSP, ASP and CGI are scripting technologies not application programming interfaces (not D).

QUESTION NO: 120
What allows Java to operate in many platforms?

A.   Server-Side JavaScript (SSJS)
B.   Java Virtual Machine (JVM)
C.   Common Object Request Broker architecture (CORBA)
D.   JavaServer Pages (JSP)

Answer: B.
Explanation: the Java Virtual Machine provides a machine independent environment where the Java code runs. Answer A, C & D are wrong, as these operations and specifications do not facilitate Java on different platforms.

QUESTION NO: 121
Which of the following choices best defines how the TCP/IP protocol suite operates?

A.   TCP/IP sends data to another computer on the network, which then passes it to other computers until it reaches the destination
B.   Using TCP/IP, a central hub gathers data from your computer, then passes it directly to its final destination
C.   TCP/IP sends data in a single transmission, so that the network can reliably deliver data to the destination
D.   TCP/IP follows only one path to deliver data to a final destination on the network, TCP/IP is unable to deliver information if connections are damaged along the network path.

Answer: A.
Explanation: TCP/IP passes data from computer to computer, although intermediate computers may actually be special devices called routers. TCP/IP does not run in a hub mode, and full physical connectivity is usually not available, so B is wrong. TCP/IP will break data down into chunks called packets, so most messages are not

transmitted as one piece, so C is wrong. TCP/IP, using TCP as the transport protocol is a connection oriented transport, which accounts and corrects for corrupted, lost, or misordered packets, so D is wrong.

QUESTION NO: 122
Armand wants his web page to be indexed by search engines according to words that are important to the content. How should Armand do this?

    A.   He should submit the URL of his home page to the major search engines for automated indexing
    B.   He should use the proper <META> tag attributes and values in the body of each HTML document
    C.   He should include all the important words on the first line of his site's home page
    D.   He should use an external style sheet to ensure a consistent display of each web page on his site.

Answer: B.
Explanation: META tags could be used to provide information of the content of each web page. This information can be used by the search engines to index the web pages. The major search engines would later find his home page, by their robots that scan the internet, and would use the information in the META tag to index the page (B). Only submitting the URL to the major search engines would not allow them to index the web page on its contents (Not A). Including the important words in the first line of his site is a crude way of informing the search engines of the content of the page and is not as good as use META tags (not C). Style sheets are used for formatting not for providing information on content.

QUESTION NO: 123
Which type of transmission media is a high-capacity cable used for video and communication networks and consists of two wires (signal and ground)?

    A.   Shielded twisted pair (STP) cable
    B.   Unshielded twisted pair (UTP) cable
    C.   Coaxial cable
    D.   Fiber-optic cable

Answer: C.
Explanation: Coaxial cable is high capacity, 50Mbps and up, which is used for Video (Cable TV, TV Attenna, Satelite TV) and communications networks. It consists of two wires, the signal is the inside cable, and the ground is a layer which wraps around the signal portion. STP and UTP are twisted wire pairs, (one shielded and one not), but are not used much for vide signals, so A & B are ruled out. Fiber Optic does not use a signal/ground archticture, sicne there is no polarity in a fiber signal, so D is wrong.

QUESTION NO: 124
All networks consist of what three basic elements?

    A.   Protocols, transmission media, and network services
    B.   Clients, servers, and transmission media
    C.   Network services, clients, and servers
    D.   Shared resources, hosts, and transmission protocols

Answer: A.
Explanation: we need network services (resources) to communicate with each other over a transmission media using rules (protocols). The is the basic elements. Answers B & C leaves out the protocols, so we don't have the rules, so B & C are wrong. Answer D leaves out the communications media, so we have rules and nodes, but no connectivity, so D is wrong.

QUESTION NO: 125
What is the purpose of the network layer (Layer 3) of the OSI reference model?

    A.   Establish and maintain the physical link
    B.   Support end-to-end error recovery and flow control
    C.   Organize data into packets and route packets to destinations
    D.   Provide data transmission to support standard application interfaces

Answer: C.
Explanation: packet organization and routing. Answer A is the purpose of the Physical Layer, Layer 1, Answer B is the purpose of the Transport Layer, Layer 4, and D is the application layer, Layer 7, so A, B & D are wrong.

QUESTION NO: 126
Which hardware device can connect two TCP/IP networks with different addresses?

    A.   A repeater
    B.   A hub
    C.   A bridge
    D.   A router

Answer: D.
Explanation: a router connects multiple segments which are TCP/IP addressed differently. A repeater and hub run at layer 1, the physical layer, and is not aware of layer 3 addressing, (IP Addresses), so A & B are wrong. A bridge is a layer 2 device, and is only aware of MAC addresses, not IP addresses, so C is wrong.

QUESTION NO: 127
Which is the latest formulation of Hypertext Markup Language (HTML), combining the formatting elements of the markup language with the ability to describe the function and context of information contained in the document?

    A.   HTML 4.01 Strict
    B.   HTML 4.01 Transitional
    C.   Extensible markup language (XML)
    D.   Extensible hypertext markup language (XHTML)

Answer: D.
Explanation: XHTML 1.0 is a reformulation of HTML 4.01 in XML, and combines the strength of HTML 4 with the power of XML. There are no formulations called HTML 4.01 Strict or HTML 4.01 Transitional (not C, D). There are however flavors of XHTML 1.0 called XHTML 1.0 Strict and XHTML 1.0 Transitional. XML allows you to describe the function and context of the content within a document. However, XML is not a reformulation of HTML.

QUESTION NO: 128
You are asked about the benefits of asymmetric-key encryption. Which device correctly describes a benefit of asymmetric-key encryption?

    A.   You only need one key to encrypt and decrypt the same data
    B.   Asymmetric-key encryption is faster than all other forms of encryption
    C.   Once something is encrypted, decryption is mathematically impossible
    D.   Key management is easier because the public key is distributed and the private key remains with its owner

Answer: D.
Explanation: Asymmetric key encryption is used with public/private key pairs, where the public key is freely distributed, and only the owner retains the private key. When one key, the same key is used for encryption and decryption, this is called symmetric key encryption, so A is wrong. Asymmetric key encryption is more

compute oriented, so it is not as fast as the other forms of encryption, so B is wrong. If encryption of data prevents recovery of the data, then the encryption algorithm is useless because all you did is destroy the data and will never recover it again, so C is wrong.

QUESTION NO: 129
Which of the following is an example of class B IP Address?

    A.   127.0.0.1
    B.   205.96.224.32
    C.   11.1.1.32
    D.   168.100.1. 32

Answer: D.
Explanation: 168 falls within 128-191 and is a Class B address. Answer A is the loopback address, and is considered a reserved Class A IP address, so A is wrong. Answer C is a Class A address, falling in the range of 1-126, so C is wrong. Answer B falls within the 192-223 range, and is a Class C address, so B is wrong.

Class	Range	Default Subnet Mask
A	1-126	255.0.0.0
B	128-191	255.255.0.0
C	192-223	255.255.255.0
D	224-239 (MultiCast Range)	
E	240-254 (Experimental)	

QUESTION NO: 130
Which Uniform Resource Locator (URL) is a fully qualified URL?

    A.   ftp://ftp.time/com/index.htm
    B.   /public/document/faq.htm
    C.   http://www.icann.org
    D.   image.gif

Answer: A.
Explanation:
A fully qualified URL is a web address starting that includes:
1. the protocol,for example. http:, ftp: or file:.
2. the domain name

3. the subdirectories

4. and the name of the webpage.

ftp://ftp.time/com/index.htm is a fully qualified URL, but http://www.icann.org is not since the name of the webpage is missing (not C). /public/document/faq.htm and image.gif are not fully qualified URL since the protocol is not specified (not B, D).

QUESTION NO: 131

Herman needs information about low cost paper distributor but he has only limited time. Which option should he use to find the most information in the shortest amount of time?

    A.   Use veronica to search gopher.
    B.   Use a world wide web search engine.
    C.   Use telnet to communicate to a computer that might have the information.
    D.   Visit the web sites of paper distributors that he knows.

Answer: B,

Explanation: Using a WWW Web search engine is the fastest way to find information on the WEB. Examples of search engines are AltaVista, Lycos, and Google. Sites that run search engines go out to websites and look up information and categorize it. Websites can also register with the search engines to be scanned or list themselves using special keywords. Gopher is rarely used today, as WWW has replaced its functions, so A is wrong. C & D are wrong because it requires advance knowledge to find these sites, and even though they may exist, it is not a way to find the information in the shortest time.

QUESTION NO: 132

Which of the following is a valid news group name?

    A.   comp.sys.NT
    B.   comp.sys:NT
    C.   comp:sys:NT
    D.   COMP*SYS*NT

Answer: A.

Explanation: URLs in general, or more specifically news group names, cannot contain the characters : or *. Therefore B, C, D are invalid.

QUESTION NO: 133
Gene downloads film from the World Wide Web and notices that the film name ends with .PDF. What type of ware does gene need to view this file?

- A. A micro media shock ware and flash.
- B. Real networks real player.
- C. Apple put time.
- D. Adobe acrobat reader.

Answer: D.
Explanation: PDF files are well known as Adobe Acrobat. When Gene installs the Acrobat reader, a plug-in will be installed for the browsers that will allow the file to be viewed in the browser. Shockwave/Flash uses a SWF extension, so A is wrong. B and C are wrong because PDF is only used for Acrobat.

QUESTION NO: 134
Which organization manages the domain name system?

- A. World trade organization.
- B. United states copyrights office.
- C. Internet Corporation for assign names and numbers.
- D. World wide web consortium.

Answer: C.
Explanation: Also known as ICANN, this is one of the registrars for managing a DNS. Each country has its own domain name system management. The World Wide Web Consortium defines common standards, specifications, and interoperability for the web, so D is wrong. The US copyright office is not involved with web registrations, so B is wrong.

QUESTION NO: 135
Armand has been searching the web for a gift for his son Tomas. Tomas asks to use the computer. Armand wants to ensure that Tomas cannot see which sites he has been visited. What should Armand do?

- A. Change the browser's home page
- B. Clear the browser history and cache
- C. Disable cookies

D.   Close the browser, then reopen it

Answer: B.
Explanation: The Web browser stores recently visited web pages in the browser history and in the web cache. By clearing these Tomas will not be able to see what pages Armand has visited. Changing the home page will only change the starting page of the browser (not A). Disabling cookies will only prevent web servers from saving information in the local hard disk (not C). The browser history and cache will not be reset by closing and opening the browser (not D).

QUESTION NO: 136
Evan added a new image to the company web site. The image is too large, relative to other items on the page. Which <IMG> tag attributes should Evan use to reduce the image size to 300 by 300 pixels?

A.   LENGTH= "300" SIZE= "300"
B.   DIMENSION= "300" "300"
C.   WIDTH= "300" SIZE="300"
D.   WIDTH= "300" HEIGHT= "300"

Answer: D.
Explanation: The WIDTH and HEIGT options of the IMG tag are used to specify the size of the image in pixels. The LENGTH, DIMENSION or SIZE tags cannot be used in the IMG tag.

QUESTION NO: 137
Which of the following best defines the Domain Name System?

A.   A global decentralized network connecting millions of computers
B.   A system of internet servers that support a special type of formatted document
C.   The exchange of names in standardized electronic form between two computers
D.   A system that maps hierarchical names to specific internet addresses

Answer: D.
Explanation: DNS is hierarchical naming system that maps host names to IP addresses. Internet, not DNS, is a global decentralized network connecting millions of computers (not A). DNS servers provide name resolution. DNS servers don't support a special type of formatted document (not B). DNS isn't used for exchanging names (not D).

QUESTION NO: 138
Management has complained that the employee contact lists are synchronized and that employees are spending too much time updating their e-mail lists. You must suggest a solution to this problem. Which server would be part of the solution?

A.   Web server
B.   SQL server
C.   Directory server
D.   Catalog server

Answer: D.
Explanation: A catalog server provides a central access point for searchable information across the network. A catalog server could very well be used to provide a central e-mail list.

A Web server would not be able to store the e-mail list. (not A). A SQL Server is a general database server and would not be best solution of the problem not (B). A directory Server identifies all network resources and makes them available for authenticated users. The e-mail list is not a network resource (not C).

QUESTION NO: 139
Kim wants to create persistent web documents that can be searched quickly and efficiently. These web documents should also describe the meaning of the information and organize the data that will be passed through the network. Which language will best accomplish this task?

A.   JavaScript
B.   Hypertext Markup Language (HTML)
C.   Extensible Markup Language (XML)
D.   Dynamic Hypertext Markup Language (DHTML)

Answer: C.
Explanation: XML allows you to describe the function and the context of the content within a document. It would be well suited for this scenario.

JavaScript is used to add extra functionality to a web document. You cannot construct web documents by only using JavaScript (not A). HTML, the original markup language for web pages, uses plain text files. Only META tags can be used to describe the contents of the file. XML provides better support for describing the content and is the preferred choice here (not B). DHTML allows animations, dynamic updating and interactions with web pages. It allows for the same type of limited content description as HTML.

QUESTION NO: 140
As a consultant, you have been hired to perform a security audit. Which step in the auditing process should you perform first?

    A.   Risk analysis
    B.   Critical analysis
    C.   Status quo analysis
    D.   Threat analysis

Answer: C.
Explanation: When auditing security you should take the following steps:
1. Status quo analysis
2. Risk analysis
3. Threat analysis

It is important to start with Status quo analysis to get an assessment of the current security situation.
The notion "critical analysis" isn't used in this context.

QUESTION NO: 141
You want to create a horizontal line on your web page as a graphical division element. You want the line to extend across half of the screen's width, and you want the line to start at the left margin. You also want the line to be very thick. Which HTML tag will create the graphical line that you want on your web page?

    A.   <HR WIDTH= "50%" ALIGN= "left" SIZE= "10">
    B.   <DIV WIDTH= "half" ALIGN= "left" SIZE= "1" SHADE>
    C.   <DIV WIDTH= "50%" ALIGN= "left" SIZE= "10">
    D.   <HR WIDTH= "half" ALIGN= "left" SIZE= "1" SHADE>

Answer: A.
Explanation: The <HR> tag is used to draw a horizontal line. The WIDTH attribute can be used with and without "". WIDTH with "" gives the width in percentage.

<HR WIDTH="half"> is syntactically incorrect (not D). The DIV tag defines a structural division not a horizontal line (not B, C).

QUESTION NO: 142
You are creating a web form for your site. Which <FORM> tag attribute specifies the most common process for sending form data from the client to the server?

A.   METHOD= "size"
B.   METHOD= "post"
C.   ACTION= "post"
D.   ACTION= "get"

Answer: B.
Explanation: The method POST is used to copy form data to the URL used in the query string. There is no method named size (not B)

ACTION specifies name and location of CGI scripts. It is used to run server side scripts (not C, D).

QUESTION NO: 143
What is the purpose of Simple Mail Transfer Protocol (SMTP)?

A.   To send e-mail messages to a mail server
B.   To view e-mail in a web browser
C.   To retrieve e-mail from a mail server
D.   To subscribe to a mailing list

Answer: A.
Explanation: SMTP is the standard protocol used for sending email.

Note: SMTP, Short for Simple Mail Transfer Protocol, is a protocol for sending e-mail messages between servers. Most e-mail systems that send mail over the Internet use SMTP to send messages from one server to another; the messages can then be retrieved with an e-mail client using either POP or IMAP. In addition, SMTP is generally used to send messages from a mail client to a mail server. This is why you need to specify both the POP or IMAP server and the SMTP server when you configure your e-mail application.

Incorrect answers:
B: HTTP not SMTP, is used to view e-mail in a web browser.
C: POP (Post Office Protocol), not SMTP, is a protocol for downloading electronic mail from a mail server.
D: SMTP is not specifically used to subscribe to a mailing list.

QUESTION NO: 144
Which e-commerce protocol is defined as the inter-organization exchange of documents in standardized electronic form directly between participating computers?

A.   Electronic Data Interchange (EDI)
B.   Secure Electronic Transactions (SET)
C.   Open Buying on the Internet (OBI)
D.   Hypertext Transfer Protocol (HTTP)

Answer: A.
Explanation: EDI is the unambiguous exchange of business information between two or more independent computer systems using a common format and syntax

SET is a standard protocol to secure online credit card purchases. It isn't used to exchange documents (not B).

The Open Buying on the Internet (OBI) standard is an open, flexible design for business-to-business Internet commerce solutions. The OBI standard seeks to support business-to-business electronic commerce. It isn't used to exchange documents (not C).

HTTP is a client-server protocol by which two machines can communicate over a TCP/IP connection. HTTP is the protocol used for document exchange in the World-Wide-Web. It can be used to exchange documents between different organizations. However HTTP cannot be used directly between two computers unless one of them is a HTTP server.

Therefore EDI is the best Answer to this question.

QUESTION NO: 145
The HTML recommendation describes three variations or flavors of HTML. Which of the following best describes the transitional flavor and its requirements?

A.   HTML developers must use cascading style sheets for all formatting.
B.   HTML developers must use frames with HTML four complaint mark up tags.
C.   HTML developer can use cascading style sheets or HTML four complaint mark up tags for all formatting.
D.   HTML developers can use any mark up tags that are supported in HTML recommendations one or later.

Answer: C.
Explanation: Transitional flavor allows both CSS and HTML formatting tags. The web designer can choose to use either or both in his document (C, not A).

The transitional flavor would not force web designers to use HTML frames (not B). Not all old HTML tags are allowed in the XHTML 1.0 Transitional flavor. Support for some old tags have been dropped (not D).

Note:
XHTML 1.0 is specified in three "flavors". These flavors are:
XHTML 1.0 Strict: this is used when only Cascading Style Sheet language (CSS) is used to format the document. HTML format tags are not allowed.
XHTML 1.0 Transitional: Both CSS and HTML format tags can be used.
XHTML 1.0 Frameset: This allows frames to be used.
Note 2: CSS has a better solution than frames, and frames are consider to be an old technique.

QUESTION NO: 146
In an HTML 4 complaint browser how is a radio button field displayed within a form?

    A.   A radio button is displayed as small box.
    B.   A radio button is displayed as a small round button.
    C.   A radio button is displayed as a button with a text label inside.
    D.   A radio button is displayed as a blinking series of numbers in a box.

Answer: B.
Explanation: A radio button is displayed like a small round button.
A checkbox button, not a radio button, is displayed as a small box (not A). There is no text label on the button (not C). A radio button is not displayed as a blinking series of numbers (not D).

Note: the following code is used to define a radio button in a form:
<INPUT TYPE="RADIO">

QUESTION NO: 147
Lucinda developed a web site that uses cascading style sheets exclusively to define the pages layout instructions. Which flavor of the HTML for recommendation did Lucinda use for her site?

    A.   Frame set.
    B.   Strict.
    C.   Transitional.

D.   Lose.

Answer: B.
Explanation: Lucinda should choose the XHTML 1.0 Strict flavor which only allows CSS for formatting. No formatting with HTML tags is allowed.
The XHTML 1.0 Frameset flavor allows HTML frames to be used. Linda is interesting in forcing the use of CSS though (not A). Transitional flavor allows formatting with HTML tags. Linda wants to prevent this (not C). There is no flavor called Lose.

Note:
XHTML 1.0 is specified in three "flavors". These flavors are:
XHTML 1.0 Strict: this is used when only Cascading Style Sheet language (CSS) is used to format the document. HTML format tags are not allowed.
XHTML 1.0 Transitional: Both CSS and HTML format tags can be used.
XHTML 1.0 Frameset: This allows frames to be used.

QUESTION NO: 148
What is the best defense against computer system viruses?

A.   Establishing a firewall
B.   Backing up system assets regularly
C.   Securing systems with strong passwords
D.   Running updated antivirus software regularly

Answer: D.
Explanation:
Antivirus software is required to protect against viruses. The antivirus should be updated regularly, typically automated updates several times a day through Internet.

A firewall is used to control the flow of data into and out of a network. A firewall is configured at protocol and port level. It cannot be configured to block viruses (not A).

Backing up system assets regularly is a good way to protect against loss of data. However, a virus attack could make this useless if it infects these assets (not B).

Viruses would not be stopped by using strong passwords. A virus doesn't require a password to infect a system (not C).

QUESTION NO: 149
The <title> tag is used within which tag?

    A.   <form>
    B.   <head>
    C.   <body>
    D.   <table>

Answer: B.
Explanation: The <title> tag is only used within the <head> tag, not with the <form>, <body> or the <table> tag.

QUESTION NO: 150
The HTML specification is controlled by which one of the following organizations?

    A.   Internet engineering task force (IETF).
    B.   Internet research task force (IRTF).
    C.   World wide web consortium.
    D.   Internet Corporation for assigning names and numbers.

Answer: C.
Explanation: The World Wide Web Consortium (W3C) develops interoperable technologies (specifications, guidelines, software, and tools) for the Web. This includes HTML specifications.

The Internet Engineering Task Force (IETF) is a large open international community of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and the smooth operation of the Internet. IETF isn't concerned with the HTML specification (not A).

The mission of the Internet research task force (IRTF) is to promote research of importance to the evolution of the future Internet by creating focused, long-term and small Research Groups working on topics related to Internet protocols, applications, architecture and technology. IRTF doesn't work with HTML specifications (not B).

The company that is responsible for assigning names to IP addresses doesn't work with the HTML specification (not D).

QUESTION NO: 151
Which uniform resource locator URL is the best example of a fully qualified URL?

    A.   ftp://ftp.CIWcertified.com/pub/example.exe
    B.   /public/image/stripe.gif
    C.   http://www.CIWcertified.com
    D.   filename.htm

Answer: A.
Explanation: A fully qualified URL is a web address starting that includes:
1. the protocol, for example. http:, ftp: or file:.
2. the domain name
3. the subdirectories
4. and the name of the webpage or the file.

ftp://ftp.CIWcertified.com/pub/example.exe is a fully qualified URL, but http://www.CIWcertified.com is not since the name of the webpage or file is missing (not C). /public/image/stripe.gif and filename.htm are not fully qualified URL since the protocol is not specified (not B, D).

QUESTION NO: 152
Brenda is searching the Internet for wedding consultants in Danbury Wisconsin. To perform an advanced search, which is the most specific search string that Brenda can enter?

    A.   (Danbury AND Wisconsin) AND wedding OR consultant.
    B.   (Danbury AND Wisconsin) AND "wedding consultant".
    C.   (Danbury AND Wisconsin) AND wedding consultant.
    D.   (Danbury AND Wisconsin) AND wedding AND consultant .

Answer: B.
Explanation:
In order the get the most specific search string that will give us few but correct hits we require that the words Danbury and Wisconsin are included. Then we require that the sentence "wedding consultant" is included as well.

The OR part, wedding OR consultant, is not restrictive enough. It would allow all kind of consultants and all kind of pages on weddings (not A).

The last part of the search string, wedding consulting, is not specific enough. It would, for example, find web pages were a chess consultant is wedding someone (not B).

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The last part of the search string, wedding AND consulting, is not specific enough. It requires that both words are included but not in which order. The search string would, for example, find web pages were a chess consultant is wedding someone (not D).

QUESTION NO: 153
You are using Cascading Style Sheets (CSS) to format your web site. You created an external style sheet to apply the same look and feel to all your pages. Which tag will you use on each page to reference your external style sheet?

    A.   <STYLE>
    B.   <LINK>
    C.   <SPAN>
    D.   <BODY>

Answer: B
Explanation:
Authors specify external style sheets with the LINK element.

  Example: <LINK href="mystyle.css" title="compact" rel="stylesheet" type="text/css">

Incorrect Answers:
A: The <STYLE> tag is used inside the style sheet document. It is not used to reference a style sheet document.
C: The <SPAN> tag is used to define a structure within a document. It cannot be used to reference style sheets.
D: <BODY> is the tag used for the body of an HTML document. It is not used connection with style sheets.

QUESTION NO: 154
Which of the following is an Apple QuickTime file name extension?

    A. .eps
    B. .jpg
    C. .mov
    D. .mp3

Answer: C
Explanation:
MOV is used for movie files.

Incorrect Answers:
A: EPS is a print image compression, it is Encapsulated PostScript.
B: JPG is a picture compression format for pictures and images.
D: MP3 is an audio compression format usually used for music.

QUESTION NO: 155
Sara created a web site with 50 pages. She wants to apply a style rule to the H3 selector on all pages in the web site. Which Cascading Style Sheets (CSS) technique should Sara use to declare the property and value for all documents?

   A.   Inline style
   B.   Embedded style
   C.   Imported style sheet
   D.   External style sheet

Answer: D
Explanation:
An external sheet could centralize the administration of the style sheet settings. It is the best solution.
An External Style Sheet is a template/document/file containing style information which can be linked with any number of HTML documents. This is a very convenient way of formatting the entire site as well as restyling it by editing just one file.

Incorrect Answers:
A: It would be awkward to use inline style. The style tags would have to be inserted at every place they would be used.
           Inline style is the style attached to one specific element. The style is specified directly in the start tag as a value of the STYLE attribute and will apply exclusively to this specific element occurance.
B: An embedded style sheet would be included in the header of all web pages at the side. This would make the administration of changes to the style sheet very time consuming.
           Embedded style is the style attached to one specific document. The style information is specified as a content of the STYLE element inside the HEAD element and will apply to the entire document.
C: It would not be necessary to use an Imported Style Sheet. We don't need to combine
           An Imported Style Sheet is a sheet that can be imported to (combined with) another sheet. This allows creating one main sheet containing declarations that apply to the whole site and partial sheets containing

declarations that apply to specific elements (or documents) that may require additional styling. By importing partial sheets to the main sheet a number of sources can be combined into one.

QUESTION NO: 156
Which protocol allows you to establish a continuous connection with a server, and then run a text-based application on that server?

    A.   Gopher
    B.   Telnet
    C.   File Transfer Protocol (FTP)
    D.   Simple Mail Transfer Protocol (SMTP)

Answer: B
Explanation:
Telnet allows you to sign onto the telnet server and become a connected terminal. From there you have a local console where you can execute commands on the server. Telnet runs as a line mode command executer, and cannot run graphical (GUI) applications, so it must be used for only text-based commands and applications.

Incorrect Answers:
A: Gopher, the predecessor of HTTP, is a text based menu system for searching and finding information.
C: FTP allows file upload and download, it does not provide the ability to run commands on the server.
D: SMTP is used for mail transfer. It can be operated in text mode is you use telnet. SMTP by itself does not provide for execution of applications on the server.

QUESTION NO: 157
A circuit-level gateway is one type of:

    A.   Firewall
    B.   E-commerce payment application
    C.   Intrusion-detection software
    D.   Port

Answer: A
Explanation:
A circuit level gateway acts like a proxy on the transport layer and is a function that can be provided by a firewall.

Incorrect Answers:
B: The gateway operates within the TCP/IP protocol stack, and is below the application layer. It filters packets, it is not an application.
C: Intrusion-Detection Software (IDS) is used to determine potential system breakins, and is not a gateway operation.
D: A port is a component used for addressing a service.

QUESTION NO: 158
As the number of users on your network is increasing, the performance of users' Internet access is degenerating. You must suggest a solution to restore performance to prior levels. Which server would be part of your solution?

    A.   WINS server
    B.   Proxy Server
    C.   DHCP server
    D.   Catalog server

Answer: B
Explanation:
A feature of proxy servers is caching, where the proxy server caches pages and files retrieved from the Internet. If several users are hitting the same web page, thus increasing cache hits, satisfaction by the cache reduces traffic on the shared Internet connection. This is achieved because the 2nd and later attempts to get the web page are satisfied from the cache and not retransmitted down the Internet connection.

Incorrect Answers:
A: WINS is used for NetBIOS connections between Windows machines. WINS is not used for Internet connections, Internet uses DNS. The use of DNS does not affect performance, and is a requirement to use the Internet in the first place.
C: DHCP assigns the IP address on the local network, it does not affect performance in the user of the Internet or any network.
D: A catalog server is not a standard TCP/IP function, and will not affect the performance of using the Internet.

QUESTION NO: 159
Hackers from a certain organization repeatedly attack your web servers. Your manager wants you to implement a firewall that blocks all connections from that organization. Which type of firewall should you implement to protect your web servers?

A. Packet-filtering firewall
B. Application gateway
C. Network Address Translation firewall
D. Proxy server firewall

Answer: A
Explanation:
You require a packet filter that filters the offending IP address and drop those packets at the firewall.

Incorrect Answers:
B: An application gateway operates on a program basis, and we need to operate on a packet level to filter the packets.
C: NAT is used to translate internal addresses, and the problem here is external packets.
D: A proxy is used to protect the internal system by issuing commands on behalf of a client. It is an internal function, an the attack is external.

QUESTION NO: 160
IPSEC is a standard that provides packet-level encryption. IPSEC is associated with which technology?

A. SSL
B. PPTP
C. L2TP
D. VPN

Answer: D
Explanation:
This is a problem that can cause a lot of discussion. From a software perspective, in Windows 2000, IPSEC is only supported on L2TP (Layer 2 Tunneling Protocol). The first inclination would be to answer L2TP. But IPSEC is not a Windows standard, it is an Internet standard and was first available from router to router. When used from router to router, it is router software and not operating system software that applied here. So, IPSEC can be used for almost any type of transmission, but is used for tunneling and to create tunnel circuits between two points. For this reason, we select VPN (Virtual Tunneling Protocol), which includes both PPTP (Point to Point Tunneling Protocol) and L2TP. If you wanted to answer this question exclusively under the premise of Windows 2000, then you would select L2TP. But we need to answer the question on a general basis when the question does NOT indicate a particular operating system.

Incorrect Answers:
A: SSL (Secured Sockets Layer) is a security protocol used for protecting data, and is also an encryption method. (IPSec is an encryption method too)

B: PPTP can use an IPSec tunnel if the tunnel is established between two routers. PPTP does not natively support IPSec.

C: L2TP may use IPSec (it is optional and has to be enabled for the transmission) and under Windows 2000 can use IPSec with L2TP natively. The choice between C & D for this question can be a toss-up and will bring on a lot of discussion.

QUESTION NO: 161
Which choice best describes half-duplex data transmission?

    A.   Data travels in only one direction.
    B.   Data travels in two directions, but only one direction at a time
    C.   Data travels in two directions simultaneously, but only at half speed
    D.   Data travels in two directions simultaneously

Answer: B
Explanation:
That is the definition, it is a two way street, but one direction at a time.

Incorrect Answers:
A: This is simplex.
C: There is no definition for this.
D: This is full-duplex.

QUESTION NO: 162
Which common network component is a low-level device that amplifies the electronic signal traveling on a cable segment to ensure that these signals do not degrade?

    A.   Bridge
    B.   Repeater
    C.   Hub
    D.   Router

Answer: B
Explanation:
This is the definition of a repeater.

Incorrect Answers:

A, D: These are segmentation devices that separate a network into segments. These can be viewed as a method to allow signals to travel farther, but these are high level devices and is a complex approach to extending a segment.

C: Hubs may or may not amplify signals. Switches usually do. But these devices are more complex than repeaters, and although they provide repeating functions, the correct answer here is an individual repeater inserted where signals might otherwise degrade.

QUESTION NO: 163
Which connection medium operates at a maximum speed of 44.736 Mbps?

    A.   ISDN
    B.   DSL
    C.   T3 line
    D.   T1 line

Answer: C
Explanation:
This is the T3 transmission speed, which is usually duplex and gives you a max of 44.736 in EACH direction.

Incorrect Answers:
A: ISDN provides up to 144Kbps (2x64Kbps plus 16Kbps) channels.
B: DSL currently provides transmission speeds up to T1 speeds (1.544Mbps)
D: A T1 line transmits at a maximum of 1.544Mbps.

QUESTION NO: 164
Your manager attended a half-day seminar and learned about polymorphic viruses. She asks you to explain them further. What feature of polymorphic viruses make them the most difficult viruses to detect?

    A.   They avoid detection by redirecting hard-drive requests from the virus scanning software
    B.   They attach themselves to executable programs, making them undetectable when you list the directory
    C.   These viruses are written as macros in Microsoft Word documents, so they go undetected because virus scanning generally scans only executable files.
    D.   These viruses are able to appear as a different process each time they are run, thus they elude detection.

Answer: D
Explanation:
Virus detection is based on examining a signature (the code segment) of the virus within a module. A polymorphic virus eludes detection by dynamically altering the signature as it infects other modules.

Incorrect Answers:
A: This is a form of stealth viruses, that hide themselves.
B: This is the method of almost every executable virus.
C: These are Macro Viruses, and current virus detection programs are now capable of scanning for this type of virus.

QUESTION NO: 165
Which of the following is a function of a firewall?

    A.   Identifying DNS servers for the DNS domain
    B.   Maintaining a routing information table
    C.   Providing symmetric-key encryption services
    D.   Filtering packets

Answer: D
Explanation:
The main function of a firewall is to filter packets. This involves examining the packets, and either allowing them to pass or drop. The first firewalls were routers that used packet filters to protect the network. Over time the filtering process became more sophisticated, and required computers running firewall programs.

Incorrect Answers:
A: Identification of the DNS servers can be obtained via the whois command, It is not a function of the firewall.
B: Routing information tables is a function of routers. Although the firewall may implemented on a router, the routing tables is not the function of the firewall application.
C: A firewall does not provide encryption services. A firewall can support certain types of VPN services which use this type of encryption, but these are advanced features which might not exist in all firewalls. The issue here is what do ALL firewalls provide, and at a minimum it is packet filtering. Without packet filtering – it is NOT a firewall.

QUESTION NO: 166
Derek is creating an image map named "cityscape." in his HTML code. What must he use as the corresponding USEMAP name?

A. "cityscape""
B. cityscape.gif"
C. "#cityscape"
D. "!cityscape"

Answer: C
The USEMAP= "#cityscape" attribute with specifies that an image map with the name of cityscape should be used. The FaceMap image map must be defined at another location within the same HTML document.

The USEMAP= "#cityscape" attribute and value specifies a local reference within the same HTML document.

Incorrect answers:
A, B, C: These are all incorrect USEMAP syntax.

Note: An example of the use of an image map.
First we define a map name. We insert the same name for the map as was specified in the USEMAP attribute above. Then we define the map with area elements. The code is included in the same HTML file as the code from the question above.

```
<map name="#cityscape">
<area shape="rect" coords="left-x, top-y, right-x, bottom-y">
<area shape="circle" coords="center-x, center-y, radius-x">
<area shape="poly" coords="x1,y1, x2,y2 x3,y3, ...">
</map>
```

QUESTION NO: 167
What port does the Domain Name System (DNS) use?

A. 21
B. 80
C. 53
D. 25

Answer: C
Explanation: DNS uses TCP port 53.

Incorrect answers:
A: FTP, file transfer protocol, uses TCP port 21.
B: HTTP, hyper text transfer protocol, uses TCP port 80.

D: SMTP, simple mail transfer protocol, uses TCP port 25.