

Come & Join Us at VUSTUDENTS.net

For Assignment Solution, GDB, Online Quizzes, Helping Study material, Past Solved Papers, Solved MCQs, **Current Papers**, E-Books & more.

Go to <http://www.vustudents.net> and click **Sing up to register.**



<http://www.vustudents.net>

VUSTUENTS.NET is a community formed to overcome the disadvantages of distant learning and virtual environment, where pupils don't have any formal contact with their mentors, This community provides its members with the solution to current as well as the past Assignments, Quizzes, GDBs, and Papers. This community also facilitates its members in resolving the issues regarding subject and university matters, by providing text e-books, notes, and helpful conversations in chat room as well as study groups. Only members are privileged with the right to access all the material, so if you are not a member yet, kindly SIGN UP to get access to the resources of VUSTUDENTS.NET

» » Regards » »

VUSTUDENTS.NET TEAM.

Virtual University of Pakistan

IT-430

Short Questions Midterm

Question No: 21 (Marks: 2)

What value will be printed after executing the following statement in JavaScript:

`document.write(Math.pow(3, 2));`

In this function math which is object describe the method of pow and 3, 2 are the arguments of object to method. So if we printed after executing the above statement in JavaScript than resulted value will be 9

OR

```
Math.pow(base, power)
Math.pow( 3, 2 ); // returns 9 (3 * 3)
```

Question No: 22 (Marks: 2)

What is a web server?

Web server – machine that services internet request.

OR

Web server is a machine that serves up the web page requests of a client on the internet. It is a combination of hardware and software. Decision as regards the type of a web server is largely dependent on the volume and type of web activities. So, transaction processing sites generating dynamic pages with high traffic volumes would need web server software that is more efficient and can easily be upgraded.

**1. How many types of outside attacks that are the security threat over internet?
Write only names?**

Following are outside attacks that are the security threat over internet:

1. Snooping
2. Man in the middle attacks
3. IP address spoofing
4. Passwords attacks

2. Write a short note on Circuit Level Firewall?

Circuit level firewall is set of rules to determine that the incoming packets are allowed or not to pass though any firewall. This type of firewall works on international organization for standards model. On higher levels of OSI model this firewall is more complicated.

3. Describe the importance of Cryptography in internet data transfer security in E-Commerce?

1. It provides the Transaction Integrity. Transaction detail of both the parties can be verified which help to built the confidence between business communities.
2. It provide Privacy like it provide controls to prevent third parties from getting access to the information within the transaction
3. Without cryptography, it is doubtful that banks, businesses and individuals would feel safe doing business online.
4. Cryptography provides the confidence to the customer that their data is safe and secure. Otherwise due to lack of confidence and doubt e-commerce business can not flourish.

Question No: 26 (Marks: 5)

Write a list of comparison operators in JavaScript with symbols.

Comparison operators

- '==' for Equal
- '!=' for not equal
- '<' for Less than
- '<=' for less than equal
- '>' for Greater than
- '>=' for Greater than equal



5. Write HTML code for the form displaying a drop-down list containing the following entries: Honda, Suzuki, Santro, and Corolla.

```
<Html>
<Head> <title> </title></Head>
<Body>
<tr>
<td width="170" height="20" align="left">Cars:</td>
<td width="340" height="20" align="left">
<select size="1" name="D1">
<option selected >Select</option>
<option > Honda </option>
<option > Suzuki </option>
<option > Santro </option>
<option > Corolla </option>
</select></td> </tr></Body></Html>
```

5. In the code given below, what does it mean by document and write?

```
<HTML>
<HEAD>
<TITLE>example-writing on the page</TITLE>
```

```

</HEAD>
<BODY>
<SCRIPT LANGUAGE="JavaScript" TYPE="text/javascript">
<!--
document.write("Hello! Thank you for visiting my web site.")
//-->
</SCRIPT>
</BODY>
</HTML>

```

Answer:

“Document” is used as a browser object
“Write” is used to display something on the page.

What is the function of firewall? (2 Marks)

Firewall’s function is to provide protection to a computer against outside attacks. By examining and filtering the data it provides protection. Hence it plays a vital role in data protection.

How does "Man in the Middle Attack" operate? (3 Marks)

As its mention in its name the attacker control the data between sending and receiving computers. With a technique he redirects the data in his computer.

OR

In it the attacker is able to monitor, capture and control data between sending and receiving machines. He may apply IP address spoofing technique to divert the packets to its machine, then modify the packets and resend the misleading information to the actual client.

Show the result of Code. (5 Marks)

```

<HTML><HEAD><TITLE>Using the Math object</TITLE></HEAD><BODY>
<H1>Using the Math object </H1>
<SCRIPT LANGUAGE="JavaScript" TYPE="text/javascript">
<!-- document.write("Math.sin(0) :"+Math.sin(0)+"<P>");
document.write("Math.pow(2,3) :"+Math.pow(2,3)+"<P>");
document.write("Math.min(181,158) :"+Math.min(123,133)+"<P>");
//-->
</SCRIPT></BODY></HTML>

```

Answer:

Using the Math object
Math.pow (2,3) :8
Math.min (181,158): 123

What are the types of Firewall? Discuss briefly (5 Marks)

There are 3 types of Firewall:

1. Circuit level firewall
2. Packet firewall
3. Application gateway

5) Difference b/w (i) Virus & Worms

- Worms spread from computer to computer; viruses have the capability to travel without any help or human action.
- A worm can replicate itself which means that it can send copies of itself to everyone listed in the email address box on a system. Viruses need to be activated through a human action.
- Another difference is that viruses modify existing programs on a computer unlike worms which can install back doors or drop viruses on the system they visit.

(ii) Backdoors & Trojan Horse (5 Marks)

Back Doors are those hostile programs which, when run on a machine, install hidden services in order to give attackers remote access capabilities to a compromised machine.

Trojan horses are those programs that appear harmless but actually have some malicious purpose. The term Trojan horse has been borrowed from history.

Supply chain management: It is a type of software which is a part of warehouse management. It includes transaction and supply of goods. It is a vital part in business process as it shows the relation between controlling goods and its management. Its' basic tool is forecasting of goods for the organization.

1) Name three Style Properties (2 Marks)

- i. Text-transform
- ii. Vertical-align
- iii. Text-align

2) Name Three Server Side Scripting Language (2 Marks)

- i. PHP - PHP: Hypertext Preprocessor
- ii. ASP - Active Server Pages

iii. PERL - not an acronym

3) Types of Cryptography and difference between them. (3 Marks)

Cryptography is a collection of mathematical techniques used to ensure confidentiality of information

Two types :-

- Symmetric Cryptography

In symmetric cryptography same keys are used for encryption and decryption.

- Asymmetric or Public Key Cryptography

In this type a pair of public and private keys is used for encryption and decryption

4) What is function of Commands: (3 Marks)

str.toLowerCase()

str.toUpperCase()

str.Split()

```
document.write("str.toLowerCase() :"+str.toLowerCase()+"<P>");
```

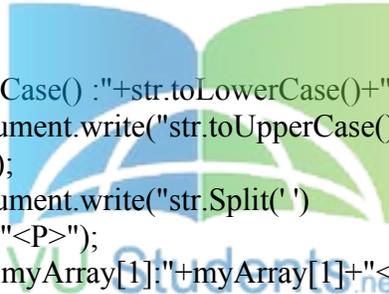
```
[11:25:59 PM] kamran: document.write("str.toUpperCase()
```

```
:"+str.toUpperCase()+"<P>");
```

```
[11:27:48 PM] kamran: document.write("str.Split(' '
```

```
myArray[0] :"+myArray[0]+"<P>");
```

```
document.write("str.Split(' ')+myArray[1]:"+myArray[1]+"<P>");
```



6) Write personal detail and save file with intension abc.js and call it in Java script Code to print value in HTML page. (5 Marks)

- 1) Create an instance of date and write the methods to get date and minutes?
- 2) To get the date/time in a different format, an instance of the date object can be created. In the following
- 3) example 'd' is such an instance. To define the instance d of the date object we have to use a constructor of
- 4) The date object, preceded by the word 'new'. Constructor is defined as the initializing function used to
- 5) Create instance/copy of an object. It is after the name of the object whose constructor it is. Note that we can invoke or apply different methods/functions of the date object using this instance 'd', e.g, d

What is web server (marks : 2)

Web server is a machine that services internet request.

What does 'parseFloat (string)' and NaN value mean (marks : 2)

- parseFloat (string) is a string to read and convert to a floating-point number.
- Nan (Not a Number) is a value of numeric data type representing an undefined or un-representable value, especially in floating-point calculations.

4. Write a brief note on ERP and write any two ERP software's name (marks :

Enterprise Resource Planning (ERP) is a concept that integrates all aspects of a business e.g, accounting, logistics, manufacturing, marketing, planning, project management etc. at a single place. An ERP system such as SAP is expensive. Ecommerce sites/software has to fully integrate with ERP software, wherever it is used.

Enterprise Resource Planning is a computer based system which manages internal and external resources of business that includes assets, financial issues, project management, human resource and marketing. The purpose of this software is to regulate the flow of information among all business functions. It builds a centralized database and it has the common platform. ERP System creates unique and enterprise system environment.

The names of ERP Software

- SAP
- SAGE
- Microsoft Dynamics



Question No: 17 (Marks: 1)

What does this mean? Padding-right

Padding-right means add space to the right of the content.

Question No: 18 (Marks: 1)

Do you agree or not that using Cascading Style Sheets

one can apply an image to sections of one's page or even to individual words.

This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design). CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. So i am agree.

OR

Yes! I am agree that Using Cascading Style Sheets (CSS) one can apply a background color or image to sections of one's page or even to individual words.

Question No: 19 (Marks: 2)

Suppose, there is an applet at "<http://www.vu.edu.pk/demo.class>". Write the code to include this applet in your web page.

```
<HTML> <BODY>  
<APPLET CODE= "http://www.vu.edu.pk/demo.class". width=100  
height=200>DEMO</APPLET>  
</BODY> </HTML>
```

Question No: 20 (Marks: 3)

What do you think, is there any difference between Static and Dynamic IP Address assignment? Discuss.

A static IP address is a number (in the form of a dotted quad) that is assigned to a computer by an Internet service provider (ISP) to be its permanent address on the Internet. Computers use IP addresses to locate and talk to each other on the Internet, much the same way people use phone numbers to locate and talk to one another on the telephone. When you want to visit whatis.com, your computer asks a domain name system (DNS) server (think telephone information operator) for the correct dotted quad number (think phone number) for whatis.com and your computer uses the answer it receives to connect to the whatis.com server.

Question No: 21 (Marks: 5)

What is cryptography? What techniques are used for cryptography?

Definition:

is the practice and study of hiding information. Modern cryptography intersects the disciplines of mathematics, computer science, and engineering. Applications of cryptography include ATM cards, computer passwords, and electronic commerce.

Techniques of cryptography:

Digital signature standard

ELgamal

various elliptic curve

password

cramer shoup

Key exchange protocol

Question No: 22 (Marks: 10)

Analyze the following given code showing some Cascading Style Sheets tags and explain its lines one by one.

```
< html>  
< head>  
<style type="text/css">  
h1 {text-decoration: overline}  
h2 {text-decoration: line-through}  
h3 {text-decoration: underline}
```

```

a {text-decoration: none}
</style>
</head>
<body>
<h1>This is header 1</h1>
<h2>This is header 2</h2>
<h3>This is header 3</h3>
<p><a href="http://www.w3schools.com/default.asp">This is a link</a></p>
</body>
</html>

```

h1 {text-decoration: overline}- Defines a line above the text
h2 {text-decoration: line-through}- Defines a line through the text
h3 {text-decoration: underline}- Defines a line below the text
a {text-decoration: none}- Defines a normal text

Question No: 22 (Marks: 2)

What does ‘parseFloat(string)’ And NaN mean?

- The parseFloat() function parses a string and returns a floating point number. This function determines if the first character in the specified string is a number. If it is, it parses the string until it reaches the end of the number, and returns the number as a number, not as a string.
- The NaN property represents "Not-a-Number" value. This property indicates that a value is not a legal number.

Question No: 23 (Marks: 3)

Write at least three rules for writing an XML code.

Rules for writing an XML code

- All elements must be properly nested <outer><inner>content</inner></outer>
- All attribute values must be quoted <FRIES SIZE="LARGE">
- All elements with empty content must be identified by ending in />

Question No: 24 (Marks: 3)

How ‘Man in The middle Attacks’ operates?

Man in the middle attacks

In it the attacker is able to monitor, capture and control data between sending and receiving machines. He may apply IP address spoofing technique to divert the packets to its machine, then modify the packets and resend the misleading information to the actual client. Another form of man-in-the-middle attack is where the hacker is able to substitute the IP address of a genuine web site with the IP address of his own web site due to some security hole in the software that runs on a domain name server. A client would think that he is communicating or receiving the information form a genuine web site, though it would not be the case actually.

Question No: 26 (Marks: 5)

Differentiate between front end and back end.

Front end consists of that information which is visible to the user and he can interact with the same through some interface. The back end comprises that information which resides on the server side and is used to create certain dynamic results for the user. It would include different programs or scripts that may be developed in different languages/tools. Backend is mainly used for two purposes – for querying with the databases and for the maintenance of state. We can use different tools (ASP, JSP etc.) for that purpose depending upon their respective advantages/disadvantages.

Question No: 21 (Marks: 2)

What value will be printed after executing the following statement in JavaScript?

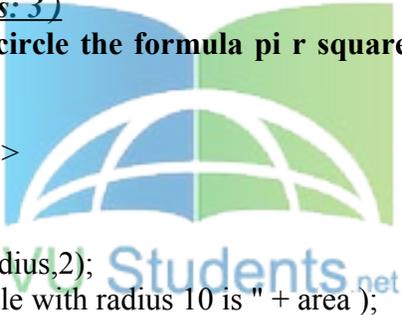
```
document.write( Math.pow(3, 2) );
```

9_

Question No: 23 (Marks: 3)

To calculate the area of a circle the formula πr^2 is used. How would you code it in JavaScript?

```
<html>
<script type="text/javascript">
var radius,area;
radius = 10;
area = Math.PI*Math.pow(radius,2);
document.write("Area of circle with radius 10 is " + area );
</script>
</html>
```

The logo for Vustudents.net features a stylized globe with blue and green segments, overlaid with a white grid pattern. The text 'Vustudents.net' is written in a blue, sans-serif font below the globe.

Question No: 24 (Marks: 3)

Name four commonly used web server operating systems.

- Microsoft Windows NT Server
- Microsoft Windows 2000 Advanced Server
- Microsoft.NET Server
- Linux or Unix based operating systems such as Solaris

Question No: 25 (Marks: 5)

Write the types of firewalls. Only names? Explain these briefly

Packet filter firewall

It uses a set of rules to determine whether outgoing or incoming data packets are allowed to pass through the firewall.

Circuit level firewall

It is quite similar to the packet filter firewall. It also works on the basis of a set of rules for filtering packets but operates at the transport layer of the OSI Model so has greater functionality.

Application gateway firewall

It operates at application layer of the OSI Model. It uses strong user authentication to verify identity of a host attempting to connect to the network using application layer protocols such as FTP. In contrast to packet filter firewall, it filters the requests rather than packets entering/leaving the network. It can block any outgoing HTTP or FTP requests.

Question No: 26 (Marks: 5)

Write the JavaScript code which will display the following in a web page using a FOR loop:

The number is 0
The number is 1
The number is 2
The number is 3
The number is 4
The number is 5



```
<html>
<script type="text/javascript">
var no;
for (no=0; no<6 ; no++){
document.write("The number is " + no + "<br>" );
}
</script>
</html>
```

Question No: 21 (Marks: 2)

What does PPTP stand for?

PPTP stands for point to point transfer protocol.

VPN connections or tunnels are managed by Point to Point Tunneling Protocol (PPTP) which due to encryption provides secure transport of private communications over the public internet. A VPN connection thus can be created between the branch office and the corporate head office.

Question No: 22 (Marks: 2)

What are the keywords to define a variable and a function in JavaScript?

“var” is the keyword used to define a variable in Javascript

e.g var a; “function” is the keyword to define a function in javascript

e.g function myfunction(){ // some code }

OR

A variable in JavaScript can be defined using the keyword „var and a function by the Keyword „function.

Question No: 23 (Marks: 3)

Identify the object, property and method in the following:

Math.sin(45)

Math.PI

Math is the object in above case

PI is the property of Math object

Sin() is the method of Math object

Or

document.write("Math.sin(45) :"+Math.sin(45)+"<P>");

document.write("Math.PI : " +Math.PI +"<P>");

Question No: 24 (Marks: 3)

Performance of web servers can be evaluated mainly on the basis of two factors.

What are they?

Performance of web servers can be evaluated mainly on the basis of two factors:

- Throughput, which is the number of http requests that a particular server hardware and software can handle in the unit time; and
- Response time, which is the amount of time a web server requires to process one request. Web server hardware architectures

Question No: 25 (Marks: 5)

Write the code for a web page displaying a button named "Testing". After clicking that button an alert should be displayed saying "The test is successful".

```
<html>
<head>
<script type="text/javascript">
function sndAlert()
{
window.alert("The test is successful!!!");
}
</script>
</head><body>
<FORM
NAME="form1">
<INPUT TYPE="Button" name="showAlert" VALUE="Show Alert"
```

```
onclick="sndAlert()">
</FORM>
</body>
</html>
```

Question No: 21 (Marks: 2)

How Certification Authority (CA) issues the certificates? Describe briefly

A certification authority is defined to be a trusted public/private body that attests the association of a particular individual with his/her corresponding public key. A CA signs digital certificates with its private key. There are many CAs working in the field but the pioneering or the most reputed CA is Verisign which is based in America.

Certification authorities work in a hierarchical fashion. There is the CA at the top called root CA (the most reputed CA). It can issue certificates to CAs working below it and those CAs' can further issue certificates to CAs working under them. In this fashion a hierarchy of CAs is developed with each CA confirming the public key of the CA below it through a digital certificate.

Question No: 22 (Marks: 2)

Discuss the role of child element tags while in writing XML code.

When creating an effective file following the rules of XML, child elements organize the information. A root element is a container for all other elements. While you must have a root to create a viable XML file, it is the child elements that add functionality to the page.

Question No: 24 (Marks: 3)

Write a function for the addition of two numbers?

```
Function add()
{
var a,b,c;
a = 1;
b = 2;
c = a+b;
document.write("The addition of 1 and 2 gives " + c + "<br>");
}
```

Question No: 26 (Marks: 5)

What is the difference between an interpreted and a compiled language? Give one example of each.

Interpreted computing languages are languages whose source code is processed by a software program called an interpreter that reads in the text and immediately acts upon the instructions defined by the text. Compiled computing languages are languages whose source code is processed by a software program called a compiler that converts the source code into a file which can then be run directly or indirectly by a computer operating system.

Example of Compiled language compiled language - like C, C++,
Examples of interpreted languages are Perl, PHP, Ruby, and Python.

Question No: 17 (Marks: 1)

Precisely explain this code of line:

What will be text alignment on the web page?

<Center>Education provides a better understanding of life</center>

Question No: 18 (Marks: 1)

In which cable, the stealing of data is most difficult?

A very interesting aspect of fiber-optic cable is that because it uses light to transfer network data, it is most susceptible to tapping (that is, the stealing of data off the line itself).

Question No: 20 (Marks: 3)

Discuss the difference between text page and text area?

A text page resource is a simple page written using plain text whereas the text area element indicates a multi-line text field.

Question No: 21 (Marks: 5)

Differentiate between the Ring Topology and Star Topology.

Ring Topology is also known as a ring network, the ring topology is a computer network configuration where each network computer and device is connected to each other forming a large circle (or similar shape).

Star Topology there is a central connection point called the hub which is a computer hub or sometimes just a switch. In a star network the best advantage is when there is a failure in cable then only one computer might get affected and not the entire network.

Question No: 22 (Marks: 10)

a) Why we use router instead of switch on WAN?(5)

Router and switch use a hardware and software combination to send data over a network. Routers divide the larger networks like WAN (Wide Area network) into smaller segments called subnets. Router uses Routing information protocol and make up a routing table which contains information about network addresses and routes to deliver data. Unlike switch which uses MAC address, router uses IP address of the destination attached to the data packet and finds the shortest possible path available to send the data to the destination in this way router are more efficient in sending data over larger networks like WAN.

b) Differentiate between the Switch and Router? Any three differences.(5)

Differences between Switch and Router:

Switch and router are networking devices which are used in a network to send data. Both switch and router use a combination of hardware and software to send data.

Switch

1. In switch the network is divided into smaller segments known as Virtual LAN.
2. It uses MAC address check to send the data to the destination.
3. It is not a decision making device.

Router

1. The larger networks are further divided into smaller parts known as Subnets.
2. It uses IP address to check the shortest available path to reach the destination device.
3. Router is a decision making device.

Question No: 17 (Marks: 1)

With reference to Topic log files, what do you understand from “Make a mailing list”?

You can trace the location from where customers are visiting and prepare a mailing list for marketing purposes

Question No: 18 (Marks: 1)

What do you say that Cookies can also be used to maintain state between two broken sessions? Justify with solid argument

It is possible that some information of the previous session is stored in the cookie file, and this information is available (through cookie) to the server side on starting a subsequent session.

Question No: 19 (Marks: 2)

Define E-business with at least two examples?

An E-business is defined as company/entity that has an online presence. E-businesses that have the ability to sell, trade, barter or transact over the web can be considered as e-commerce businesses. An e-business model is defined by a company’s policy, operations, technology and ideology.

Examples of E-business

- i. Online News Services
- ii. Online Entertainment

Question No: 20 (Marks: 3)

What is function of “face” attribute in font tag? Show a small code example.

Font tag defines various font properties. Size, Face and Color are its attributes. Attributes can be used simultaneously in a tag as you can see below:

```
<font size=5 color=red face=Arial>internet and commerce</font>
```

Example:

```
<p><font face=“Arial”>This text in the Arial font.</font>
```

Question No: 21 (Marks: 5)

Why we use Address Resolution Protocol (ARP) for sending data packets?

Each computer on the internet prepares a list of its IP address and corresponding MAC address using ARP. Through RARP this information is forwarded to a network server. When a data packet arrives at the destination router, it inquires about the corresponding MAC address from the network server, inserts it and delivers the MAC address. A data packet therefore needs both IP and MAC addresses to reach its destination.

Question No: 22 (Marks: 10)

Specify briefly the role of the following terms keeping in view "sound files" on a web page.

SRC="URL", WIDTH="n", HEIGHT="n", autostart="true/False", VOLUME="n"

Question No: 14 (Marks: 1)

Which of the following does not interpret its code?

- ▶ ASP
- ▶ PHP
- ▶ **JSP**
- ▶ Coldfusion

Technologies like ASP, PHP and Coldfusion interpret their code except the new version of ASP (ASP.net) where the code is compiled. In case of JSP a program called JSP engine compiles the code.

Question No: 13 (Marks: 1)

What is a correct way of referring to a stylesheet called "mystyle.xml"?

▶ **<?xml-stylesheet type="text/xsl" href="/mystyle.xml" ?>**

▶ <link type="text/xsl" href="/mystyle.xml" />

▶ <stylesheet type="text/xsl" href="/mystyle.xml" />

▶ <?stylesheet type="text/xsl" href="/mystyle.xml" ?>

We write XSL rules that match various xml elements. For that consider the following example:

XML code <? xml version="1.0"?> <?xml-stylesheet href="catalog.xml" type="text/xsl" ?>

Application gateway firewall: It operates at application layer of the OSI Model. It uses strong user authentication to verify identity of a host attempting to connect to the network using application layer protocols such as FTP.

A firewall is a combination of hardware and software that sits between the internet and internal network of an organization to protect the network from outside attack. It can examine the data entering or leaving from the network and can filter the data according to certain rules, thus, protects the network from an attack.

Client side processing: Data that is processed on the client side mainly includes the HTML code, most of JavaScript, applets and cookies.

Point to Point Protocol (PPP), is used to set up the dial up connection between RAC and RAS for exchange of data packets

Constructor is defined as the initializing function used to create instance/copy of an object.

Local Variables: If you declare a variable within a function, the variable can only be accessed within that function. When you exit the function, the variable is destroyed. These variables are called local variables. You can have local variables with the same name in different functions, because each is recognized only by the function in which it is declared.

In case of IMAP the message is not deleted in the email server and thus can be reopened from another location/machine.



E-commerce Software

Following are the names of some well-known e-commerce software:

- Intershop Enfinity
- IBM's WebSphere Commerce Professional Edition
- Microsoft Commerce Server 2002

Certification authority (CA): A certification authority is defined to be a trusted public/private body that attests the association of a particular individual with his/her corresponding public key. A CA signs digital certificates with its private key.

Some common event handlers are as follows: onclick, ondblclick, onfocus , onload, onsubmit, onselect, onblur, onchange, onmousedown, onmousemove, onmouseout, onmouseover.

The + Operator Used on Strings: The + operator can also be used to add string variables or text values together. To add two or more string variables together, use the + operator.

Sound Files: Sound file formats are: AU, WAV, MP3, and MIDI. Sound files can be used in anchor tag as follows: `<Ahref="song.wav">Click here for some greeting! `. We can also embed such files using embed tag.

Example - Embedding `<HTML> <HEAD><TITLE>Example - Embedding</TITLE></HEAD><BODY> Click the Play button for some nice music:
 <EMBED SRC="Skylar.MP3"> </BODY></HTML>`

Routers: Routers use a combination of hardware and software to forward data packets to their destination on the internet. They are more efficient and sophisticated than bridges and switches. They can divide large networks into logical segments called Subnets on the basis of IP addressing scheme. A router is a decision making device. When a data packet arrives at a router it reads the network addresses from the IP address on the data packet and determines the shortest possible path through which this packet can be delivered to its destination.

`<MARQUEE ...>` is often regarded as one of the "evil" tags, and that perception alone might be enough reason to not use it. However, used lightly and with taste (and understanding that it will never render everywhere), `<MARQUEE ...>` isn't such a bad tag. It can work well for announcements.

Submit and reset button

To create a submit or reset button use the following instruction within the form tag:
`<Input type="submit" value="label"> <Input type="Reset" value="label">`
"Label" is the value that appears on the button. You may not want to use 'value' attribute

Data link layer

It places data packets into data frames. Network Interface Card Drivers/Protocols operate at this layer. It is used to identify MAC or hardware address of computer machines. A mathematical calculation, Cyclical Redundancy Check (CRC), takes place here to confirm integrity of data frames

Valid JavaScript variable: JavaScript variable names may not start with a numeral (0-9). These variable names would be illegal: 7lucky, 99bottlesofbeer, and 3zacharm. A good rule of thumb is to have your variable names start with a lowercase letter (a-z) and use underscores to separate a name with multiple words (i.e. my_var, strong_man, happy_coder, etc).

A digital signature is attached to the scrambled message by signing the message digest with Private Key of the sender.

The **HTTP protocol is connectionless and stateless**. After the server has responded to the client's request, the connection between client and server is dropped and forgotten.

Term Common Gateway Interface (CGI) is defined as a standard method/protocol that allows data from forms to be used by programs on the server.

Attachment of the background image: Using background-attachment: fixed, the background image would remain in place when the user scrolls up and down the page.

Question No: 17 (Marks: 1)

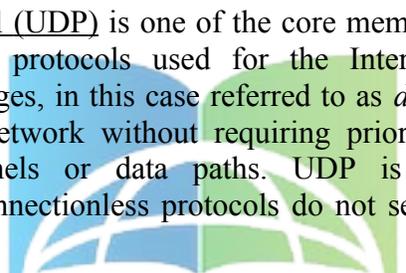
What is the function of UDP protocol at TCP/IP stack? Give precise answer.

Function is transport

Connectionless transport protocol

OR

The User Datagram Protocol (UDP) is one of the core members of the Internet Protocol Suite, the set of network protocols used for the Internet. With UDP, computer applications can send messages, in this case referred to as *datagram*'s, to other hosts on an Internet Protocol (IP) network without requiring prior communications to set up special transmission channels or data paths. UDP is a simpler message-based connectionless protocol. Connectionless protocols do not set up a dedicated end-to-end connection.


VU Students.net

Question No: 18 (Marks: 1)

What tag is used for displaying a border between the frames?

- BORDER or FRAMEBORDER – Set this attribute to 0 for not displaying a border between the frames

Question No: 21 (Marks: 5) 2+3

What is a web form? What is its usage in reference to client-server communication?

A webform on a web page allows a user to enter data that is sent to a server for processing. Webforms resemble paper forms because internet users fill out the forms using checkboxes, radio buttons, or text fields.

You are now familiar with the fact that internet presents a two-way communication model, also called the Client-Server Model. In the client server model some data is processed on the client side and certain data is processed by the server on the server side.

Question No: 22 (Marks: 10)

Explain the following frame tags? Discuss the usage of these

- `<frameset>...</frameset>` Contains the frameset The frames layout is given by comma separated lists in the rows and cols attributes.

- `<frame>` or `</frame>` Delimits a single frame, or region, within the frameset. A separate document linked with the `src` attribute appears inside.
- `<noframes>...</noframes>` Contains normal HTML content for user agents that don't support frames
- `<iframe>...</iframe>` An inline frame places another HTML document in a frame. Unlike an object element, an inline frame can be the "target" frame for links defined by other elements and it can be selected by the user agent as the focus for printing, viewing its source etc.

Question No: 17 (Marks: 1)

What are the two types of twisted pair cables for networking?

- a. Unshielded twisted pair (utp)
- b. Shielded twisted pair (stp)

Question No: 18 (Marks: 1)

What it stands for IIS?

Internet information server



Question No: 19 (Marks: 2)

When does we use the `parseFloat()` function?

'`parseFloat()`', that is, a function of predefined global object.

Question No: 20 (Marks: 3)

Name the JavaScript function that convert strings to float numbers. How do you give the function a string value to convert to a number?

String to number: If you want to change a string to a number, first make sure there are only the characters 0-9 in the string. What I always do is simply multiplying the string by 1.

```
var c = '1234';
```

```
d = c * 1;
```

Since multiplying assumes numbers, JavaScript makes the string a number, if possible. If that isn't possible, the result is NaN. Note that you cannot do

```
var c = '1234';
```

```
d = c + 0;
```

Question No: 19 (Marks: 2)

What is bandwidth of a network?

Bandwidth is the speed of a network. It indicates how many bits can be transmitted across a network in a given time.

Question No: 21 (Marks: 5)

Write your personal profile in a file saving it with the extension of e.g. “abc.js”and then call it in a JavaScript code.

Code#1

```
<!--  
document.write("my name: dua" +"<P>")  
document.write("my id: mc090" +"<P>")  
document.write("My Uni Name: VU" +"<P>")  
!-->  
code#1 File save with extension "abc.js"
```

Code#2

.html coding:

```
<HTML>  
<HEAD>  
</HEAD>  
<BODY><H1>My Profile</h1>  
<SCRIPT SRC="abc.js"></SCRIPT>  
</body>  
</html>
```



Question No: 22 (Marks: 10)

Explain any three of the outside attacks briefly.

- **Eavesdropping/ sniffing/snooping** In this type of attack the hacker has the ability to monitor network traffic using some kind of network monitoring software. For example, a hacker may install some backdoor or Trojan horse that can monitor the key strokes of a user while typing and send the typed information to the hacker.
- **Password attacks** Such attacks are basically a result of eavesdropping through which the hacker is able to know the account ID or password of a particular user. Then using it the hacker gains access to the network and gather information such as user names, passwords, computer names, resources etc. That can lead to modification, deletion or rerouting of network data.
- **IP address spoofing** You know that there are two IP addresses available on a data packet – IP addresses of the sender and the destination. The address of the destination only matters for routing. It is possible that a hacker (having special capabilities) seizes the control of a router, changes the IP address of the source/sender on data packets and thus forces the destination machine to send the information/web page to a different machine, that is, the machine of the hacker. This is called IP address spoofing.
- **Man in the middle attacks** In it the attacker is able to monitor, capture and control data between sending and receiving machines. He may apply IP address spoofing technique to divert the packets to its machine, then modify the packets and resend the misleading information to the actual client. Another form of man-in-the-

middle attack is where the hacker is able to substitute the IP address of a genuine web site with the IP address of his own web site due to some security hole in the software that runs on a domain name server. A client would think that he is communicating or receiving the information from a genuine web site, though it would not be the case actually.

- Denial of services (DOS) attacks In this type of attack, the attacker gains access to the network and then send invalid data to network services or applications. These services or applications consequently become unable to perform their normal tasks or functions. Hence, sending a flood of data to a particular service or computer can cause it to overload or shutdown. This attack is specially used to take down websites on the internet, when repeated requests for web pages are deliberately initiated so as to choke down a web server.

Question No: 22 (Marks: 10)

Consider the following code of an XML document and identify where its standard code rules are being applied. You are required to write the identified tag along with its related rule side

```
<?xml version="1.0"?>
<PlanetsList>
<Planet Name="Mercury"> <Distance>36 million miles</Distance>
<Moons>None</Moons>
<DayLength> 176 days</DayLength></Planet>
<Planet Name="Venus"> <Distance>67 million miles</Distance>
<Moons>None</Moons>
<DayLength>1 17 days</DayLength> </Planet>
<Planet Name="Earth"> <Distance>93 million miles</Distance>
<Moons>One</Moons>
<DayLength>24 Hours</DayLength> </Planet>
</PlanetsList> <BR/>
```

First line of the code is a declaration that it is an XML document (version 1). Second and last lines of the code are called root element tags. We enclose other elements within the root element tags. We assign a name to the root element that best describes the purpose of our file. Other elements are called child elements. Thus, planet is a child element of planet list. Further, each property of a planet is the child element of the planet element. So, distance, moons and day length are the child elements of planet element. Name is the attribute of the planet element. Names of child elements can be different between two organizations, which can make the sharing of information difficult. For instance, some may describe the property of a planet as Day and others may use the word Day length for that purpose.

Question No: 21 (Marks: 2)

What value will be printed after executing the following statement in JavaScript:

```
document.write( Math.pow(3, 2) );
```

```
document.write("Math.pow(2,3) :"+Math.pow(2,3)+"<P>");
```

Question No: 24 (Marks: 3)

Name four commonly used web server operating systems.

Commonly used web server operating systems are Microsoft Windows NT Server, Microsoft Windows 2000 Advanced Server, Microsoft.NET Server, Linux or Unix based operating systems such as Solaris.

Question No: 26 (Marks: 5)

Differentiate between front end and back end.

Front end consists of that information which is visible to the user and he can interact with the same through some interface. The back end comprises that information which resides on the server side and is used to create certain dynamic results for the user. It would include different programs or scripts that may be developed in different languages/tools. Backend is mainly used for two purposes – for querying with the databases and for the maintenance of state. We can use different tools (ASP, JSP etc.) for that purpose depending upon their respective advantages/disadvantages.

Question No: 21 (Marks: 2)

What is Term ‘Catalog Display’ means?

A Static catalog is a simple list written in HTML. One has to edit the HTML code to change it. A dynamic catalog stores information about items in a database usually on a different computer accessible by the web server. It can provide photos, detailed description and search facility about the availability of items.

Question No: 22 (Marks: 2)

What is meant by a constructor?

It is initializing function used to create instance of an object. It is after the name of the object whose constructor it is.

Question No: 23 (Marks: 3)

What is meant by ‘Shopping Cart’ in context of e commerce?

Shopping cart was used wherein the user had to remember and type certain information. It is now replaced by electronic shopping cart/basket that keeps record of the items the customer has selected and allows customers to view the details of the items selected. The customer can add new items or remove items. To order an item, a customer simply clicks at that item option. All details of an item, including its price, product no. and order identifying information are stored automatically in the cart.

Question No: 24 (Marks: 3)

We have an array named my Array where this sentence is stored. “Welcome to Virtual University!” If we apply str.split(”) method. What will be the output of str.split(”)myArray(4) and str.split(”)myArray(2) respectively.

Str.Split split the string based on the blank spaces.

str.split(”)myArray(4) = blank
str.split(”)myArray(2) = virtual

Question No: 19 (Marks: 2)

Suppose, there is an applet at "http://www.vu.edu.pk/demo.class". Write the code to include this applet in your web page.

```
<APPLET CODE= "http://www.vu.edu.pk/demo.class" width=100 height=200>  
DEMO </APPLET>
```

Question No: 17 (Marks: 1)

Shortly Explain RIP?

Routing protocol used by routers to determine the best path for packets on the network.

Question No: 18 (Marks: 1)

In HTML, for displaying information systematically which tag do we usually use?

Tables are used largely for page layout as well as for displaying information systematically

Tables use the basic tag <Table> and </Table>.

All other table tags fit between these two tags. <TR> (table row tag) and </TR> (corresponding end tag) are used to create/add a row. <TD> (table data tag) and </TD> (corresponding end tag) are used to divide a row into number of columns to create cells. <TH> (table header tag) and </TH> (corresponding end tag) labels each column as a heading. To provide the caption of a table <caption> and </caption> can be used.

Question No: 20 (Marks: 3)

What is MAC address? How does it help server to identify the client?

Data to be delivered on a network has to be converted first into serial transmission. This is done through a device called Network Interface Card (NIC) that must be installed in a computer on the network. NIC has also got printed on it a 48 bits unique address called the MAC or hardware address of the computer machine. In other words, it consists of 12 hexadecimal characters and can have different format as shown below:

090017A9B2EF

09:00:17:A9:B2: EF

09-00-17-A9-B2-EF

Question No: 17 (Marks: 1)

What does this mean document.write("str.charAt(3) : "+str.charAt(3) + "<P>"); ?

CharAt() is the function/method of string object.

charAt(3) would provide the value of the element at the index three. document.write("str.charAt(3) : "+str.charAt(3) +"<P>") Mean that character string at index number three should return to me

Question No: 18 (Marks: 1)

What does this term mean "Non-repudiation"?

Non-repudiation means that the execution of the digital signatures cannot be denied by the one who is alleged to be the executor of those signatures.

Question No: 19 (Marks: 2)

What are servlets?

Servlets are very fast Java applications on the server side which are available in an active form in the memory of the server. They use JDBC to connect to the databases.

A Servlet is a Java class in Java EE that conforms to the Java Servlet API, a protocol by which a Java class may respond to HTTP requests. They are not tied to a specific client-server protocol, but are most often used with this protocol.

Question No: 20 (Marks: 3)

What are the three methods for using style sheets with a web page?

- **Method #1: Embedded method**

This method places the CSS code itself inside the tags of your page. With this method each page is separate; therefore, the code must be placed inside each page in order for the styles to work their magic on every page of your website.

Example: `<!--p { font-family: Verdana, Arial, Helvetica, sans-serif; font-size: 12px; color: #000000; h1 { font-family: Arial, Helvetica, sans-serif; font-size: 14px; color: #000099; }`

- **Method # 2: Linking to an external style sheet**

A separate file is created with the extension „.css“, containing your style definitions (see mystyles.css below). Use <Link> tag inside a web page header to apply these style definitions. mystyles.css: `h1 {color: red} P {font-size: 34pt}`

Example: `<HTML> <head> <Link Rel="stylesheet" Type="text/css" href="mystyles.css"> </head> <body><h1>this heading will appear red</h1> <p> this line has a 34pt font</p></body> </html>`

- **Method # 3: Inline styles**

It is used where a particular tag is to be given a different style. We use „style“ as an attribute in a tag and give properties/values in a format as shown in the example below:

`<HTML><body><h1 style="font-size: 40pt">this heading has font-size 40-point</h1> </body></HTML>`

Question No: 20 (Marks: 3)

What are cookies? Why these are used in web development?

Cookies are small amounts of data stored by the web browser. They allow you to store particular information about a user and retrieve it every time they visit your pages. Each user has own unique set of cookies.

Cookies are typically used by web servers to perform functions such as tracking your visits to websites, enabling you to log in to sites, and storing your shopping cart. However we don't need fancy web server programming to use cookies. We can use them in JavaScript, too!

Question No: 21 (Marks: 5)

Identify protocol stack used in each layer of OSI model?



Question No: 22 (Marks: 10)

"The role of a Certification Authority is similar to a passport office." Explain it.

You may have noticed that the role of a Certification Authority is analogous or similar to a passport office. The issuance of passport by the passport office attaches credibility that this particular person is entitled to travel. However, the passport is not issued by the office until detailed enquiry/verification about the identity of the person is made. Once a person holds the passport, that confirms that this particular person whose, name, address

etc. is appearing on the passport is entitled to travel. Similarly, if a digital certificate is issued by a reputed CA that would confirm to other people that this particular public key certified by the CA belongs to this individual only.

Question No: 21 (Marks: 5)

What is the difference between physical address and logical address? Support your answer with at least two examples.

A Physical address is a 48-bit flat address burned into the ROM of the NIC card which is a Layer1 device of the OSI model. This is divided into 24-bit vendor code and 24-bit serial address. This is unique for each system and cannot be changed.

A Logical address is a 32- bit address assigned to each system in a network. This works in Layer-3 of OSI Model. This would be generally the IP address. Simply we can say that Physical address is MAC address (Media Access Control) which inbuilt and Logical Address is the IP which is given manually. The address generated by CPU is referred to as a logical address. The address seen by the memory unit, i.e, the one loaded into the memory address register of the memory is referred to as physical address

Question No: 22 (Marks: 10)

How can we change a Font style of a text? Write complete tag by using an example by yourself?

Font tag defines various font properties. Size, face and color are its attributes. Attributes can be used simultaneously in a tag as you can see below: `internet and ecommerce</ font>`

Example code

```
<HTML>
<HEAD>
</HEAD>
<BODY> <H1>this is my main title</H1>
<p>here is the first paragraph. This is some <b> <i>bold text</i> </b> </p>
<p> <font face="Arial"> this text is in the Arial font. </font>
</BODY>
</HTML>
```

Question No: 21 (Marks: 2)

What you understand about Denial of services (DOS) attacks?

In this type of attack, the attacker gains access to the network and then send invalid data to network services or applications. These services or applications consequently become unable to perform their normal tasks or functions. Hence, sending a flood of data to a particular service or computer can cause it to overload or shutdown. This attack is specially used to take down websites on the internet, when repeated requests for web pages are deliberately initiated so as to choke down a web server.

Question No: 22 (Marks: 2)

Discuss the role of (W3C) keeping in view the web documents?

The goal of the W3C is to help the World Wide Web (also known as the Web) evolve by developing common languages and formats that will allow users with different hardware and software to enjoy similar features of the Web. In essence, its objective is to make the Web accessible to all and not dependent on the technology of any single company. This area encompasses defining the Web, Web documents, and the protocols for accessing and disseminating Web documents.



Question No: 23 (Marks: 3)

Differentiate between the HTML and XML. Identify At least three major differences.

The Difference Between XML and HTML

- XML is not a replacement for HTML.
- XML and HTML were designed with different goals:
- XML was designed to transport and store data, with focus on what data is HTML was designed to display data, with focus on how data looks
- HTML is about displaying information, while XML is about carrying information

Question No: 25 (Marks: 5)

Write HTML code for the form displaying a drop-down list containing the following entries: Honda, Suzuki, Santro, Corolla.

```
<Html>
<head>
<Title> </title>
</head>
<Body > <form action= "http://www.vu.edu.pk" method="post"> <select name="car">
<Option selected> --- Click to Select --- </option>
<Option>Honda </option>
<Option>Santro</option>
<Option>Suzuki</option>
<Option>Corolla</option>
```

```
</select>
</body>
</html>
```

Question No: 26 (Marks: 5)

Write a note on any two methods used to maintain state between HTTP requests.

Answer1:

A **cookie** is used to store small piece of information on client machine. A cookie contains page-specific information that a Web server sends to a client along with page output. Cookies are used for sending page-specific information because HTTP is a stateless protocol and cannot indicate whether page requests are coming from the same or different clients. You can use cookies to keep track of each individual user who access a Web page across an HTTP connection.

Application state means storing application wide-specific information such as objects and variables. The information in the application state is stored in a key-value pair and is used to maintain data consistency between server round trips and between pages. Application state is created when each browser request is made for a specific URL. After an application state is created, the application-specific information is stored in it. All information stored in the application state is shared among all the pages of the Web application by using the HttpSessionState class.

Answer2:

<http://www.beansoftware.com/ASP.NET-Tutorials/Understanding-State-Management.aspx>

Answer3: Handouts page88

Name of the organizations which are combating the great security threat. (2)

1. Computer Emergency Response Team (CERT)
2. Systems Administrator, Audit, Network and Security Institute (SANS Institute)

Enlist the "Outside attacks on the Network" and write note on DoS? 5 marks

Outside attacks

- Password attacks
- IP address spoofing
- Man in the middle attacks
- Eavesdropping/ sniffing/snooping
- Denial of services (DOS) attacks

DOS

In this type of attack, the attacker gains access to the network and then send invalid data to network services or applications. These services or applications consequently become unable to perform their normal tasks or functions. Hence, sending a flood of data to a

particular service or computer can cause it to overload or shutdown. This attack is specially used to take down websites on the internet, when repeated requests for web pages are deliberately initiated so as to choke down a web server.

Differentiate between the relative position and absolute position of a text by using CSS tags? 5 Marks

Absolute Positioning

If you position an element (an image, a table, or whatever) absolutely on your page, it will appear at the exact pixel you specify. Say I wanted a graphic to appear 46 pixels from the top of the page and 80 pixels in from the right, I could do it. `img {position: absolute; top: 46px; right: 80px; }`

Relative Positioning

When you position something relatively, you are modifying its position from where it would have been if you hadn't changed anything. I find that to be the easiest way of thinking about it.

OR

Absolute – you can place the element box anywhere on the page position:

Relative – position is relative to the normal position of the element

Position: static – position remains unchanged

Question No: 24 (Marks: 3)

What are the different logical operators in JavaScript? Only write their names. Also write the symbols of operators.

- Logical operators '&&' for logic AND operator, which returns a Boolean true if both the operands are true
- "|" for logical OR operator and it returns a value of true if one or both of the operands is true.
- "!" for logical not operator which returns false if its single operand can be converted to true, or if it is a non-Boolean value:
- "++" FOR LOGICAL INCREMENT Logical increment adds one to the previous number that holds a given variable

Short Note on Circuit Firewall? 2marks

Circuit-level firewalls are similar in operation to packet-filtering firewalls, but they operate at the transport and session layers of the OSI model. The biggest difference between a packet-filtering firewall and a circuit-level firewall is that a circuit-level firewall validates TCP and UDP sessions before opening a connection, or circuit, through the firewall. When the session is established, the firewall maintains a table of valid connections and lets data pass through when session information matches an entry in the table. The table entry is removed, and the circuit is closed when the session is terminated

Three name of server side scripting? 2 Marks

- ASP
- ColdFusion Markup Language (*.cfm)
- Java via JavaServer Pages (*.jsp)
- JavaScript using Server-side JavaScript (*.ssjs)
- PHP (*.php)
- Perl (*.pl)
- SMX (*.smx)
- Python (*.py)
- Ruby (*.rb)
- Lasso (*.lasso)
- WebDNA (*.dna, *.tpl)

Write two types of cryptography?

There are two main types of cryptography:

- Secret key cryptography
- Public key cryptography

what functions do these commands perform?

`str.toLowerCase()`

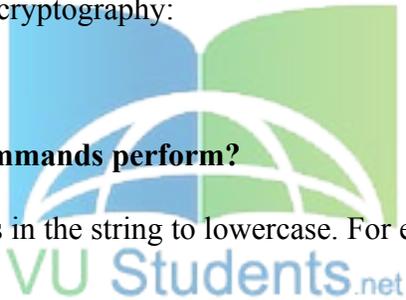
Converts all of the characters in the string to lowercase. For example, "ABC" will convert to "abc".

`str.toUpperCase()`

Converts all of the characters in the string to uppercase. For example, "abc" will convert to "ABC".

`str.Split('')`

The STRSPLIT function splits its input String argument into separate substrings, according to the specified delimiter or regular expression



Q- Customer Relationship management & Supply Chain Management ? (5)

Supply Chain Management (SCM) is the management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers (Harland, 1996).[1] Supply Chain Management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption (supply chain).

Another definition is provided by the APICS Dictionary when it defines SCM as the "design, planning, execution, control, and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand and measuring performance globally."

Customer Relationship management

Customer relationship management (CRM) is a widely-implemented strategy for managing a company's interactions with customers, clients and sales prospects. It involves using technology to organize, automate, and synchronize business processes—principally sales activities, but also those for marketing, customer service, and technical support. The overall goals are to find, attract, and win new clients, nurture and retain those the company already has, entice former clients back into the fold, and reduce the costs of marketing and client service.[1] Customer relationship management describes a company-wide business strategy including customer-interface departments as well as other departments.[2]

Question No: 20 (Marks: 1) - Please choose one

How you bold a text (in something was there)

P {font-weight:bold}

P {font-size: bold}

Rest to Don't remember I did **Green one**

Question No: 22 (Marks: 2) -

Following are the codings identify an Array?

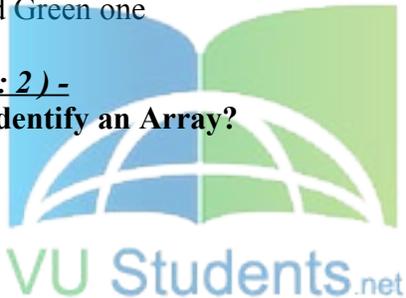
Var a = new array[100]

Var a = new array {100}

Var a = new array(100)

a = new array(1,2,3,4)

a = new array(12)



Question No: 19 (Marks: 2)

Suppose, there is an applet at "http://www.vu.edu.pk/demo.class". Write the code to include this applet in your web page.

```
<HTML> <BODY>
```

```
    <APPLET CODE= "http://www.vu.edu.pk/demo.class" width=100 height=200>
```

```
    DEMO </APPLET>
```

```
</BODY> </HTML>
```

Question No: 19 (Marks: 2)

What are the three position style properties?

Absolute – you can place the element box anywhere on the page position:

Relative – position is relative to the normal position of the element Position:

Static – position remains unchanged

Question No: 19 (Marks: 2)

What is common between proxy server and firewall?

Common things in proxy server and firewall filtering request for web pages

Question No: 21 (Marks: 2)

What you understand about Denial of services (DOS) attacks?

DOS important to establish a security policy for an e-business organization outlining as to which assets have to be protected and how to be protected.

The attacker gains access to the network and then send invalid data to network services or applications. These services or applications consequently become unable to perform their normal tasks or functions

Question No: 22 (Marks: 2)

Discuss the role of (W3C) keeping in view the web documents?

This area encompasses defining the Web, Web documents, and the protocols for accessing and disseminating Web documents. Furthermore, the consortium also addresses issues of intellectual ownership of Web documents, rating systems for Web documents, and Internet privacy.

Question No: 20 (Marks: 3)

What is the purpose of padding? How many types of padding are: Name of these?

Padding – general property that applies to all four padding properties in this order:

- Padding top – adds space on top of the content
- padding-right – adds space to the right of the content
- padding-bottom – adds space below the content
- padding-left – adds space to the left of the content

Question No: 20 (Marks: 3)

Write at least three rules for writing an XML code.

-All elements must be properly nested `<outer><inner>content</inner></outer>`

-All attribute values must be quoted `<FRIES SIZE="LARGE">`

-All elements with empty content must be identified by ending in `/>`

Question No: 20 (Marks: 3)

What does RAS and RAC stand for in context of virtual private network?

That server machine may be called a Remote Access Server (RAS) and the client may be called a Remote Access Client (RAC).

Question No: 20 (Marks: 3)

What do you think, is there any difference between Static and Dynamic IP Address assignment? Discuss.

Static IP addressing is for one customer on one IP address

Dynamic IP addressing through your Website Host it means that you are sharing an IP Address with several other customers.

Question No: 21 (Marks: 5)

Write any four essential features and two extra features which should exist in E-Commerce?

- A catalog display
Static catalog is a simple list written in HTML. One has to edit the HTML code to change it. A dynamic catalog stores information about items in a database usually on a different computer accessible by the web server. It can provide photos, detailed description and search facility about the availability of items.
- Shopping cart capability It is now replaced by electronic shopping cart/basket that keeps record of the items the customer has selected and allows customers to view the details of the items selected. The customer can add new items or remove items. To order an item, a customer simply clicks at that item option. All details of an item, including its price, product no. and order identifying information are stored automatically in the cart.
- Transaction processing It occurs when a customer clicks at checkout or confirm order button and is subjected to some payment processing mechanism. It represents the most complex part of online sale. Calculation of taxes, shipping costs etc. is important parts of this process.
- Web services Web services are defined as a combination of software tools that allow application software in one organization communicate with other programs/applications over a network by using a specific set of standard protocols. Web services can be used to obtain price and delivery information about goods from different vendors/suppliers, review this information, place the order to the right vendor/supplier and track the order till shipment is received.
- Application integration A program that performs a specific function such as creating invoices/bills or processing payment received from customers is called an application program.
- Middleware Large companies establish connections between their e-commerce software and their existing accounting system by using a type of software called Middleware which is a part of e-commerce software package.

Question No: 24 (Marks: 3)

Create an instance of date and write the methods to get date and minutes?

getHours() Returns the current number of hours into the day: (0-23)

getMinutes() Returns the current number of minutes into the hour: (0-59)

getSeconds() Returns the current number of seconds into the minute: (0-59)

getDay() Returns the number of days into the week: (0-6)

getMonth() Returns the number of months into the year: (0-11)

getYear() Returns the number of years into the century: (0-99)

curdate.getDate() Here curdate is an instant

Question No: 21 (Marks: 5)

Identify protocol stack used in each layer of OSI model?

Network protocols are those standard rules using which computers on a network communicate and

Exchange data with each other. A group of protocols that prepare the data for communication on the

Network is called the Protocol stack

Question No: 18 (Marks: 1)

Do you agree or not that in In Java Script we are not provided with certain already defined objects which are ready to use? Justify

I am not agree, because in java script we are provided with certain already defined objects which are already to use.

OR

In Java Script we are provided with certain already defined objects which are ready to use. JavaScript Reserved Keywords are part of the JavaScript language syntax. JavaScript Reserved Keywords has special meanings and used to instruct JavaScript interpreter to perform a specific pre define task. For example Alert is one of the keyword, when we use Alert function in java script, Browser immediately display Alert box.

Question

WRITE CODING 2 DRAW SHAPE

UPPER RED BORDER =10 PIXELS

RIGHT GREEN BORDER =20 PIXELS

LOWER BLUE BORDER =15 PIXELS

LEFT BLACK BORDER =20 PIXELS

`<HTML> <BODY>`

`<DIV STYLE="border-width: 10px 20px 15px 20px; border-color:red green blue black; border-style: ridge">`

This line is written in a box having ridge style border and different border colors.

`</DIV>`

`</Body>`

`</HTML>`

Question No: 19 (Marks: 2)

Which attribute is used to describe, how many times you want the sound to repeat. Discuss briefly.

Loop="value" – tells the browser how many times to play the file (you can keep the value a number or infinite) `<bgsound loop="">` The loop attribute is used to define how many times the sound will repeat itself. Between the quotes specify how many times you want the sound to repeat. Setting loop to "infinite" or "-1" will cause the sound to repeat indefinitely.

Code: `<bgsound loop="5"></bgsound>`

Question No: 21 (Marks: 2)

We want to create left margin of 10 pixels and right margin of 15 pixels. Write css code to apply both properties.

```
<HTML><STYLE>P {margin-left: 10px; margin-right: 15px} </STYLE> <BODY>
</BODY></HTML>
```

Question No: 22 (Marks: 2)

JDBC and ODBC Stands for?

ODBC (Open database connectivity) and JDBC (Java based database connectivity)

Question No: 17 (Marks: 1)

What it stands for (W3C)?

World Wide Web Consortium

Question No: 17 (Marks: 1)

What is the function of ARP protocol at TCP/IP stack? Give precise answer.

ARP: Address resolution protocol map IP address to MAC hardware address.

Question No: 18 (Marks: 1)

In which layer of OSI model, the data is converted into binary digits or electric pulses?

Physical layer

What is the consequence of NAMING function in JAVASCRIPT? (3 Marks)

To create the function, type the function keyword followed by a name for the function, followed by an opening, then a closing, parentheses, followed by an opening curly bracket “{” and ending with a closing curly bracket “}”. Here is the syntax for creating a function:

```
Function name () {}
```

The function keyword is required. It lets the browser know that you are creating a function.

The name of the function:

- Must start with a letter or an underscore
- Can contain letters, digits and underscores in any combination
- Cannot contain space
- Cannot contain special characters

Question No: 21 (Marks: 5)

How can we classify E-Commerce by the nature of its transactions? Give at least one real life example for each of its classification.

A common classification of EC is by the nature of transaction:

- Business-to-Business (B2B): electronic market transactions that take place between organizations
- Business-to-Consumer (B2C): retailing transactions with individual shoppers – typical shopper at Amazon.com is a consumer
- Consumer-to-Consumer (C2C): consumer sells directly to consumers, examples -individuals selling in classified ads, auction sites allowing individuals to put up items for auction – e.g, e-bay
- Consumer-to-Business (C2B): individuals who sell products or services to organizations and those who seek sellers and conclude a transaction
- Intra Business (organizational) EC: all internal organizational activities involving exchange of goods, services or information, selling corporate products to employees, online training and cost reduction activities
- Non-Business EC: academic institutions, not-for-profit organizations, religious/social organizations and government agencies using EC to improve their operations, customer service and reduce expense

Question: 3.

WRITE COMPLETE JAVA CODING TO DISPLAY TODAY DATE

```
<HTML> <HEAD>
<TITLE>Writing the Current Date and Time</TITLE>
</HEAD>
<BODY>
<SCRIPT LANGUAGE="JavaScript" TYPE="text/javascript">
document.write("Welcome! you are visiting my web site on " + Date())
</SCRIPT>
</BODY>
</HTML>
```

Question No: 19 (Marks: 2)

At the end of all processing, what will variable *t* contain?