1. **What are the two purposes of plus operator?**

Ans: The plus sign (+) is used both for adding numbers and concatenating string. String concatenation refers to binding one or more string into a single. It evaluate left to right.

For example-  
Concatenation:  
Var a = “New”; Var b = “Riders”; Var gap =” “; Var display = “a+gap+b”; document.write(display);  
Output = New Riders.

Calculation: var a = 10; var b = 20; document. write(a+b);  
Output = 30.

1. **What is the use of typeof operator?**

Ans: The typeof operator is unary, returning one of the following values-

1) Number, 2) String, 3) Boolean, 4) object, 5) Function, 6) Undefine 7) Null.   
To use the operator (typeof) a space and the operand, or place the operand in parentheses after the type of operator.

1. **Which operator can be used as an alternative of conditional statement?**

Ans: Java script provides switch and case statements as an alternative of conditional statement.  
Switch (expression){  
case 1: statement 1 executes; break;  
case 2: statement 2 executes; break;  
Default: default statement execute }  
document. write(expression);

1. **What are the three basic structure of JavaScript?**

Ans: Three basic structure of java Script are:  
a) Sequence - placed in sequence order.   
b) Branches – execute alternative condition.  
c) Loops –it repeat a statement.

1. **What are the three categories of operators?**

Ans: Operator can be placed into three categories:

a) Binary – it has two operands. x+y, a/b

b) Unary - it has one operands. +=, \*=, ++

c) ternary - it has three operands. (Condition? statement true: statement false)

1. **Which loop checks the condition at the end of the statement?**

Ans: Do while loop check the condition at the end of the statement. In Do while loop, first execute the statement and then checked the condition.  
function do ()  
{Statement counters increment/ decrement}   
while (termination condition)

1. **What are the three parts of for loop?**

Ans: For loop is a fixed loop as it continues from a fixed value and ended after reaching a fixed value. (a) Initial value (b) Condition (c) Increment/ decrement   
For (start value; termination; increment/ decrement)  
{Statement}

1. **Where return statement is used?**

Ans: When we create a function in JavaScript we need to remember to provide a return statement in the script, if we plan to use the function as data in another expression. We use it in the   
(1) End of the function (2) End of the statement   
**Function** returnMessege ()  
{Statement}

1. **What the benefit of using with statement.**

Ans: With statement is used when numerous function of an object is used. Using with () statement it is possible to **reduce prototype object references and makes the code more readable.**with (object references)  
{Statement}

1. **How can you fire a function?**

Ans: We can fire a function with event handlers. There are three main event categories. We can call a function in a JavaScript.

* Keyboard and mouse events
* Load events
* Form related events

1. **What are the three main event categories?**

Ans: Three main event categories are…

* Keyboard and Mouse events
* Load events
* Form-related events

1. **How function constructor and function literals are declared?**

**Ans: The function () constructor** looks like the new object or array constructor. It has this general format-   
 var variableName = new Function (“exp1”,”exp2”,”return exp3”);

**The function () literals** look more like function statements  
var variableName = function (arg1,arg2){return exp1};

Using this function as literal data provides a lot more flexibility in our scripts.

1. **Show the hierarchy of HTML form.**

Ans: The hierarchy of HTML form is given bellow:

window.document.formname.elementname.value or

window.document.forms[0].elements[0].value

1. **What do you understand by prototype concept in JavaScript?**

Ans: In java script first we create an object and then associate its properties.

That means the prototype concept is closely related with the concept of class, which treats an

object as a member of the class. It also treats the named object with all of the properties that all

members of the class have.

1. **Why object-oriented programming is essential in JavaScript?**

Ans: Object oriented programming means a set of property and behaviors. So we can use property and behavior easily by OPP. It’s easy to maintain and it is much shareable. We can also reuse it.

1. **What is Document Object Model (DOM)?**

Ans: The document object model is an **application programming interface** (API) for valid HTML documents. It defines the logical **structure of documents** and the way a document is **accessed and manipulated**.

1. **What is the benefit of preloading image?**

**Ans:**

1. Preloading or placing images in the browsers cache is simple.
2. Can place the preload object in an HTML-defined image slot.
3. Can replace it with the cached image.
4. There is no limit to the number of images that you can cache.
5. Can include the height and width.
6. **What are the functions of open and close method?**

**Ans: The open ()** method has access to most parameters, including height, location, member, resizable, scrollbars, status, toolbars and width.  
Function getWin()  
{  
Open(“sampWin.html”,”sampWin1”,”toolbar=no, width=200, height=150 ”)  
}  
**The close()** method is always self-referent with a page not part of a frameset.  
Function shutI()  
{Close();}

1. **What are the events in HTML and JavaScript?**

**Ans:**

1. Mouse Events – onMouseOver, onMouseOut, onClick, onMouseUp.
2. Key Events – onKeyDown, onKeyUp, onKeyPress.
3. Form Events – onBlur, onChange, onFocus, onReset, onSubmit.
4. Window/Page/Image Events – onAbort, onError, onLoad, onResize.
5. **What are the three cross-browser methods of history object?**Ans: 1. Back()
6. Forward()
7. Go(n)
8. **What are the two methods of location objects?**

Ans: (a) Reload () – acts just like the reload button.

(b) Replace () – it sends the page identified in the URL.

1. **What do you mean by history object? Write down its method?**

Ans: The history object is a property of the window object and is accessed through the **window.history** property. It has a cross browser property **length** and three methods.

**Methods are: (a)** Back () **(b)** Forward () **(c)** Go (n)

1. **What is difference between substring () and charAt ()?**

**Ans: Substrings (begin, end):** The substring () method extracts the characters from a string, between two specified indices, and returns the new sub string. Enters the beginning and ending numeric positions of a part of the string object.

**CharAt (n):** The charAt () method returns the character at the specified index in a string. The index of the first character is 0, and the index of the last character in a string called "txt", is txt.**length-1.**

1. **What do you mean by ‘with’ statement?**

Ans: With statement is used when numerous function of an object is used. Using with () statement it is possible to reduce prototype object references and makes the code more readable.  
with(object references)  
{Statement}

1. **What do you mean by event and event handler?**

**Ans: Event:** An event is some notable action to which a script can respond and it makes things happen and give the HTML website live.

**Event Handler:** Event Handler is the interactive trigger in HTML and JavaScript whether the script launches a function means event. Such as  
onLoad, onMouseClick, onMouseOver, onUnLoad etc.

1. **What do you mean by ceil () and floor ()?**

**Ans: Math.Ceil:** The Math.Ceil () function round numbers to the next highest integer in JavaScript language.

**Math.Floor:** The Math.Floor () function round numbers to the last/down lowest integer in JavaScript language.

1. **What is difference between setInterval () and settimeout ()?**

**Ans: SetInterval:** The SetInterval () method in JavaScript repeats a script action every many milliseconds, initiating the script after the specified number of millisecond.