JavaScript Descriptive Question and Answer:

1. Write down some features of JavaScript?

- Java Script is an interpreted language.
- JavaScript can be embedded directly into HTML pages
- It is a lightweight programming language.
- JavaScript is used to introduce dynamic interactivity into pages

2. "JavaScript is called interpreted language"- why?

JavaScript is called **interpreted language** because the browser parses the JavaScript code line-by-line and creates the equivalent machine code and having the computer to execute the interpreted code.

3. Why JavaScript is called weakly type language?

In JavaScript, type casting is not necessary to convert one data type to another data type. That means the variable containing numeric data can also contain string data without any cast and no need to declare variable data type. For these reason JavaScript is called loosely/weakly type language.

4. What do you understand by Undefined and null values?

Undefined value means a variable has been declared but has not yet been assigned a value. On the other hand, null is an assignment value. It can be assigned to a variable as a representation of no value. Also, undefined and null are two distinct types: undefined is a type itself (undefined) while null is an object.

5. What are primitive data types?

Boolean values, numbers, strings, and the null and undefined values all constitute primitive data types. Primitives are stored in a fixed chunk of memory, depending on the type of primitive data. Primitives have a finite and known amount of space in memory.

6. What is variable?

A variable is a name that contains value that can change, depending on conditions or on information passed to the program. A variable can contain different type of data types such as Boolean values, numbers, strings etc.

var i =0;

7. What do you mean by local variable and global variable?

The variable has two major categories: global and local.

Global variables are accessible from anywhere in the program and retain their values until the document is unloaded.

Local variables, on the other hand, are created during function calls for temporary use and are accessible only within the functions that create them.

8. What do you mean by Array? Declare an array?

An array is a collection of homogenous data elements which are stored in consecutive memory locations. Always address location of array starts from 0. In JavaScript arrays are treated as objects. Each property in an array is called an Element and each element can be assigned a value. An array can be declared in JavaScript in the following ways…

var myArray=new Array( );

9. Which are called LIFO based and FIFO based method?

LIFO based methods are:
Push – insert at the end of the list
Pop -   remove from the end of the list

FIFO based methods are:
unshift – insert at the first of the list
shift -   remove from the first of the list

10. What are the two purposes of plus operator?

a)   To add numeric numbers.
b)   To concatenate string data.

11. What is the use of typeof operator?

The JavaScript type of operator returns the data type of an operand.

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var found = true;
```
alert(typeof found) // displays Boolean

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

Ternary operator can be used as an alternative of conditional statement.
If(a>10) b= 50;
Else b=75;
Alternative of the above conditional statement is:
a>10 ? b=50 : b=75

13. What are the three basic structure of JavaScript?

The three basic structure of JavaScript is shown as:-Sequence, Branches, Loops (iterative)

A compound structure is simply a structure that uses two or more of the three basic structures. For example:-

 Var i=0; var ab=14;
While(i<ab){ If (i==7)   Alert("your are half way though"); i++; }

14. What are the three categories of operators? Explain

Unary Operator: It works on a single variable of literal.

var a=85; var b= -a;
increments(++) and decrements(--) are also unary operator.
Binary Operator: It takes two expressions and combine them into another complex expression.
var calculation=(total/n)+73; the divided(/) and plus(+) are binary operator.
Ternary Operator: It can combine three expressions into one complex expression. var a==b?c=44:c=55;

15. Which loop checks the condition at the end of the statement?

Do/while loop.
Do{
    Statement
}While(termination condition)   //Condition check here

16. What are the three parts of for loop?

The three parts of for loop are:

1. start value
2. termination condition
3. increment/Decrement

for(var i=0; i<10; i++)

17. What do you mean function and return statement?

Ans: A function is a "subprogram" that can be called by code external (or internal in the case of recursion) to the function. The composed sequence of statements is called the function body. Values can be passed to a function, and the function can return a value.

Return statement is used to exit from the function and return value from the function to the caller.

18. What do you mean by 'with' statement?

 "with" statement is used for shortcut. Using with statement , we can specify the object name once and then follow it with all the properties and their values in this format:

With(object){   statement with properties only }

19. How can you fire a function?

We can fire a function in three ways:

a. function() Constructor-This Function()Constructor looks like the new object or array constructor.
   Var variable name=new Function("exp1"," exp2"," return exp3")
b. Function literals-A newer varsion of the function () constructor can be found in function literals.
    var variable name=new Function()(arg1,arg2){return ex1};

c. Methods in Function- works like a method, FunctionName.toStrings()

20. What are the main event categories?

 Events can be divided into following categories:

a) Keyboard events
b) Mouse events
c) Form-related events
d) Page/Window/Image events

21. How function constructor and function literals are declared?

The function ()constructor looks like the new object or array constructor.
Var variable name=new Function("exp1"," exp2"," return exp3")

Function literals look more like function statements in that they use curly braces, they have no unique of name of their own for purposes of reference.
var variable name=new Function()(arg1,arg2){return ex1};

22. Show the hierarchy of HTML form.

Hierarchy of HTML Form

Window (object)
    Document (property of window)
        Form (property of document)
           Element (property of form)
               Element value property of element)

23. What do you understand by proto type concept in JavaScript?

In JavaScript, the concept of class that threats an instance of an object to be a member of the class, the prototype concept threats the named object with all of the properties that all members of the class have. Every object has a prototype by default. Since prototypes are themselves objects, every prototype has a prototype too.

24. Why object-oriented programming is essential in JavaScript?

OOP is essential in JavaScript when,

- The script become longer
- We need modular programming
- We need to re-use the script

25. What is Document Object Model (DOM)?

The Document Object Model (DOM) is the model that describes how all elements in an HTML page, like input fields, images, paragraphs etc., are related to the topmost structure: the document itself. By calling the element by its proper DOM name, we can influence it.

26. What is the benefit of preloading image?

Main benefits of preloading image are:

- It helps user to load a page quickly.
- It saves our time to wait.

var myImage=new Image();
myImage.src="flower1.jpg";

27. What are the functions of open and close method?

Open Method: It is used to open a new window. The parameters of open method are height, location, menubar, resizable, scrollbars, status, toolbars and width. We can use as many or few of these options as we want.

Close Method: It is used to close any open window. It is always self-referent with a page not part of a frameset.

28. What are the events in HTML and JavaScript?

There are four events in HTML and JavaScript. They are-

1. Mouse Events: onclick, ondobule click, onmousedown, onMouseup, onMousemove, onMouseout, onMouseover.
2. Key Events: onkeyDown, onkeyUp, onkeyPress
3. Form Events: onBlur, onFocus, onReset, onSubmit.
4. Page/Window/Image events: onAbort, onError, onBlur, onResize, onUndownload.

29. What are the three cross-browser methods of history object?

The three cross browser methods of history objects are- back(), forward() and go().
Back() – It used to go the previously visited site.
forward() – It is used to go the recently visited sites.
Go() – It uses positive values and negative values both for forward and backward references.

30. What are the two methods of location objects?

The two methods of location object are reload () and replace ().

Reload() is used for adding a new location removes the previous one.
Replace() is used for adding a location replacing the previous one.