JAVASCRIPT

Word vs Keyword
Word - Random word that user types (No meaning).
Keyword - Anyword that has a special meaning
ex:- For, while etc.

Var, Const, Let
var → You can change the value of var
const → constant, can't change the value
assigned to something which is declared
as const.
Let → variables declared with let have block scope
cannot be redeclared in the same scope.

Hoisting
Variable and functions are hoisted which
means their declaration is moved on the top
of the code
EX:- variable can be declared after it has been
used.

```
X = 5
ele = document.getElementById ("demo");
Var X;
```

Types in JS
Primitives → They are identified by the variable
name you used for declaration.
Any value which when copied, gets
real copy is primitive

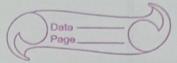Reference → [ ], ( ), {,} these are references

when you copy a reference value they do not get copied but, instead their reference is passed.

Ex:-   var a = 12;   Primitive
        var a = [1, 2, 3, 4];   Reference.

Ex:-   var a = [1, 2, 3, 4];
        var b = a   // referenced. b → a
        changes in b will affect a also.

Conditionals —
if , else , else-if.

```
if(False) {            if (True) {            if (False) { }
} x                    //execute             else if (True) {
else {                 }                     // execute
} execute              else {                }
                       } x                   else {
                                             } x
                                             }
```
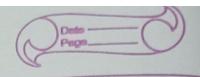
Loops
Repeat some condition again and again.
for , while , do-while .

Functions
Functions are mainly used for 3 purposes:-
1> when you want to use your code in future
2> when you want to reuse your code.
3> when you want to run your code with different data everytime.

syntax :- function abcd () {   // Function Statement
             }

only runs when it is called.
Arguments are passed inside function's paranthesis.
parameters ⟶ variables in which values are stored.

Arrays
                                    store
when we want to use, more than one values inside
a variable, we use array.
   EX: var a = [12, 13, 14] ; Group of values.

Push, Pop, shift, unshift.

Push : To add an element in an array or in any
other data structure.
   EX:-   var arr = [1, 2, 3, 4] ;
          arr.push (8);   //   [1, 2, 3, 4, 8]

Pop : To delete an element (last element)
   EX:-   var arr = [1, 2, 3, 4];
            arr.pop ();   // [1, 2, 3]

Unshift : Adds a value or prepends a value
          in an array.
   EX:-   var arr = [1, 2, 3, 4, 5, 6, 7];
           arr.unshift (0);   // [0, 1, 2, 3, 4, 5, 6, 7]

Shift : Removes the starting value from array
   EX:-   var arr = [1, 2, 3, 4];
            arr.shift ();   // [2, 3, 4]

- Splice : Remove any value from an array from any index.

  EX:- var arr = $[1,2,3,4,5,6,7]$;
  arr.splice $(2,2)$;
  // $[1,2,5,6,7]$

Objects
Holds a details of a particular variable object/
in a key-value pairs

1) Blank object   var a = {};

2) Filled object   var a = {
         age : 24,
         name : "Raj";
    }

<u>Details</u> of a particular identify

To access the value we use "."
    EX:-   a.name.

object properties — These are the fields defined with some values inside an object.

Methods :- any property which has a function as its value.