Batch 3 - JavaScript Full Interview Test (by Re-Re Sudhan)

Instructions:

- Answer any 10 questions.

- Each question carries 3 marks. (Total: 30 marks)

- Time: 1 hour.

- Write clean code + clear explanation.

Section A - Easy (Basics)

Q1. What will be the output?

let x = '5';

let y = 5;

console.log(x == y);

console.log(x === y);

Q2. Declare a variable using const for your name and let for your age, and print both.

Q3. Write a function square(n) that returns the square of a number.

Q4. Convert this function into an arrow function:

function add(a, b) { return a + b; }

Q5. Explain 3 falsy values in JavaScript with small examples.

Section B - Medium (Logic + Arrays/Objects)

Q6. Write a function using rest parameters that accepts unlimited numbers and returns their sum.

Q7. Given array = [2,4,6,8,10], use .map() to return each number doubled.

Q8. Write a program to count how many even numbers are in [1,2,3,4,5,6,7,8].

Q9. Given an object = { name: 'Sudhan', batch: 3, course: 'MERN' }, print all keys and values separately.

Q10. Write a program that checks if a given number is prime or not (use loop).

Section C - Hard (Interview Style)

Q11. What is closure in JS? Write a function createCounter() that increases value each time it is called.

Q12. Given array of objects employees = [{ name: 'A', salary: 20000 }, { name: 'B', salary: 40000 }, { name: 'C', salary: 35000 }], return names of employees earning more than 30,000.

Q13. Write a function reverseString(str) that reverses 'JavaScript' -> 'tpircSavaJ'.

Q14. Write a program using for...of loop to find the largest number in [10,20,50,30].

Q15. Write a function palindrome(str) that checks if a word is palindrome (example: 'madam').

Q16. Destructure the object {id:1,name:'Laptop',price:50000} and print 'Laptop costs 50000'.

Q17. Write a function that takes an array [1,2,3,4,5] and returns only odd numbers.

Q18. Use .reduce() to find sum of [5,10,15,20].

Q19. Write a program using switch to print day name (1=Monday,...,7=Sunday).

Q20. Write a program to find factorial of a number using loop.

Section D - Advanced (Zoho Level)

Q21. Write a function flatten(arr) that converts [1,[2,3],[4,[5]]] -> [1,2,3,4,5].

Q22. Write a program using closure to create a private password that cannot be accessed directly.

Q23. Write a class BankAccount with methods deposit(amount) and getBalance().

Q24. Write code to fetch data from https://jsonplaceholder.typicode.com/posts/1 using async/await. Print only the title.

Q25. Write a function removeDuplicates(arr) that removes duplicate numbers from [1,2,2,3,4,4,5].

Q26. Write a program to count how many times 'a' occurs in 'banana'.

Q27. Write a function sortNumbers(arr) that sorts [5,1,4,2,3] into ascending order.

Q28. In DOM: Add event listener to button id='btn' that prints 'Clicked!'.

Q29. Write a function isAnagram(str1, str2) that checks if two words are anagrams ('listen' & 'silent').

Q30. Explain difference between synchronous vs asynchronous JS with example code.