By Maha Rana

CS521 Miidterm Subjective Solved

CS521 - Short Questions & Answers

1. CSS Code for Virtual University of Pakistan

```
.vu-pakistan {
    background-color: #007bff;
    color: #ffffff;
    padding: 20px;
    border: 1px solid #0069d9;
}
```

2. Components of Application Stack

1. ***Presentation Layer*** (User Interface)
2. ***Application Layer*** (Business Logic)
3. ***Business Layer*** (Data Processing)
4. ***Data Access Layer*** (Database Interaction)
5. ***Infrastructure Layer*** (Networking and Storage)

3. JavaScript Code - Array Declaration

```
let array = [1, 2, 3, 4, 5];
```

4. Difference Between Static and Dynamic Server?

Static Server	Dynamic Server
Serves pre-built HTML files	Generates HTML content dynamically
Fast and efficient	Supports server-side scripting (e.g., PHP, Python)
Limited functionality	More flexible and interactive

5. JavaScript Code - Function to Calculate Sum of an Array

```
functionsumArray(array) {
    let sum = 0;
    for(leti=0; i < array.length; i++) {
        sum+=array[i];
    }
    return sum;
}
console.log(sumArray([1, 2, 3, 4, 5])); // Output: 15
```

CS521 - Short Questions & Answers

1. JavaScript Program to Sum Two Numbers

```
let num1 = 5;
let num2 = 10;
let sum = num1 + num2;
console.log("The sum is: " + sum); // Output: The sum
is: 15
```

3. Box Model Diagram Explanation

The ***CSS Box Model*** ek structure define karta hai jo har HTML element ke around hoti hai. Ismein ***4 main parts*** hote hain:

1. ***Content*** – Jahaan text ya images hote hain
2. ***Padding*** – Content aur border ke darmiyan ka space
3. ***Border*** – Element ka edge jo padding ke baad aata hai
4. ***Margin*** – Border aur doosray elements ke darmiyan ka space

Diagram Example:

```
| Margin|  |----
----|
| Border|
```

```
|--------|
| Padding|
|--------|
| Content|
```

CS521 - Long Questions & Answers

1. JavaScript Array - 5 Students ke Marks Calculate Karna

```
let students = ["Ali", "Sara", "Ahmed", "Zain",
"Aisha"];
let marks = [85, 90, 78, 88, 95];

for (let i = 0; i < students.length; i++) {
    console.log(students[i] + " scored " + marks[i]+"
marks.");
}
```

Output:

```
Ali scored 85 marks.
Sara scored 90 marks.
Ahmed scored 78 marks.
Zain scored 88 marks.
Aisha scored 95 marks.
```

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2. Five CSS Selectors & Pseudo-Classes

CSS Selector	Description
`p {}`	**Element Selector** – Sabhi `<p>` elements ko style karta hai.
`.class {}`	**Class Selector** – Kisi specific class wale element ko style karta hai.
`#id {}`	**ID Selector** – Ek unique element ko style karta hai.
`:hover {}`	**Pseudo-Class** – Jab user kisi element par mouse le jaye to style apply hoti hai.
`:first-child {}`	**Pseudo-Class** – Kisi parent ka pehla child element select karta hai.

By Maha Rana

May Allah grant you success, ease your efforts, and bless you with wisdom and perseverance. Keep your faith strong, for with prayer, every challenge becomes an opportunity. And please remember us in your prayers.

I hope this file helps you a lot; I have tried my best to find the most relevant and authenticated answers for the questions. However, in some cases, the questions might slightly differ from the ones in your slides. I recommend that every student kindly verify the answers on their own before using them. I am not responsible for any discrepancies.

Best wishes for Mids!