**Section 1 – MCQs**

**Q#1:** The behavior……… defined?

**Ans:** b) Class

**Q#2:** When a class…….. that?

**Ans:** a) A is superclass…..

**Q#3:** How the…… Javascript?

**Ans:** b) By reference

**Q#4:** Which key word……?

**Ans:** a) Extends

**Q#5:** Which feature of OOP?

**Ans:** c) Inheritance

**Q#6:** What among the…….?

**Ans:** a) onclick

**Q#7:** Consider the below……?

**Ans:** b) document.getElementByID(“name”).value

**Q#8:** AJAX is about………?

**Ans:** a) parts of a web page

**Q#9:** What is the correct…..?

**Ans:** d) variable = new XMLHttpRequest();

**Q#10:** Which of the……..?

**Ans:** c) JSON.parse(undefined)**;**

**Section 2**

1. Write a JavaScript program to display the reading status (i.e. display book name, author name and reading status) of the following books. [Marks: 15]

**var library = [**

**{**

**author: 'Bill Gates', title: 'The Road Ahead',**

**readingStatus: true**

**}, {**

**author: 'Steve Jobs', title: 'Walter Isaacson',**

**readingStatus: true**

**}, {**

**author: 'Suzanne Collins',**

**title: 'Mockingjay: The Final Book of The Hunger Games', readingStatus: false**

**}];**

**Ans:** **Open repository link:**

<https://github.com/Qazi-Saad/quiz-3.git>

1. 1. Create a program that creates 3 Employee objects from an Employee class with ID, Name, Department and Salary properties. Values of properties should be assigned through getter and setter methods (ES6). Display all the properties of all 3 employees. [Marks: 15]

**Ans:** **Open repository link:**

<https://github.com/Qazi-Saad/quiz-3.git>

1. At times, when we access a JavaScript object, we receive raw JSON string and we need to convert it to an object ourselves to use it in our program. Similarly, we also may require an object in JSON string form. Write a program that parses JSON string in ‘member’ array from following link to an object and display its contents. You are also required to stringify the last object in ‘*member’* array.

[**https://mdn.github.io/learning-area/javascript/oojs/json/superheroes.json**](https://mdn.github.io/learning-area/javascript/oojs/json/superheroes.json) [Marks: 15]

**Ans:**

import React from "react";

function JsonProblem() {

React.useEffect(() => {

fetch(

"https://mdn.github.io/learning-area/javascript/oojs/json/superheroes.json"

)

.then((res) => res.json())

.then((data) => console.log(JSON.stringify(data.members[2].powers)));

});

const result = () => {

fetch(

"https://mdn.github.io/learning-area/javascript/oojs/json/superheroes.json"

)

.then((res) => res.json())

.then((data) => console.log(JSON.parse(JSON.stringify(data.members))));

};

return (

<>

<h1>JSON Solution </h1>

<button onClick={result}>Parse Data</button>

</>

);

}

export default JsonProblem;

**Section 3**

1. Differentiate arrow functions and regular functions. [Marks: 2]

**Ans:**

|  |  |
| --- | --- |
| Arrow Function | Regular Function |
| let add = (x, y) => {return x + y }; | var add = function(x, y) {  return x + y;  }; |
| Arrow functions do not have their own arguments and it uses the arguments from the outer function | In regular JavaScript functions, arguments keywords can be used to access the passed arguments when the function is invoked |

1. Write any three different ways to get an element from DOM? [Marks: 3]

**Ans:**

1) Get element by Id (document.getElementById)

2) Get element by className (document.getElementsByClassName)

3) Get element by Name (document.getElementsByName)

4) Get element by tagName (document.getElementsByTagName)

1. Write a program that takes a number of greater than 5 digits from input field and shows sum of all odd numbers. For example, if the input is 196783, the sum would

be 1 + 9 + 7 + 3 = 20. [Marks: 5]

**Ans:** **Open repository link:**

<https://github.com/Qazi-Saad/quiz-3.git>

1. Given an integer N, the task is to find the sum of interior angles of an N-sided

polygon. [Marks: 5]

**Ans:** **Open repository link:**

<https://github.com/Qazi-Saad/quiz-3.git>

1. Create an age calculator that takes date of birth of user and shows age in years,

months and days. [Marks: 5]

**Ans:** **Open repository link:**

<https://github.com/Qazi-Saad/quiz-3.git>

**Section 4**

Showcase your solid knowledge of JavaScript, DOM, JSON and AJAX by creating a simple webpage that displays information of pets from an API (URLs given below). The URL contain information of name of the pet, its’ species and what are its food likes and dislikes. Your task is to write code for the fetching and showing the above information of the pets. One URL contains information of 3 pets. You should dynamically access all the URLs to show the information by clicking the given button. You will click the button exactly 3 times and upon each click information of 3 pets will be shown on the page. Once all 3 click attempts are consumed, the button should disappear preventing the user to fetch data that does not exist and the page should show the final result in appended form.

**JSON URLs:** [Marks: 25]

[**https://learnwebcode.github.io/json-example/animals-1.json**](https://learnwebcode.github.io/json-example/animals-1.json) [**https://learnwebcode.github.io/json-example/animals-2.json**](https://learnwebcode.github.io/json-example/animals-2.json) [**https://learnwebcode.github.io/json-example/animals-3.json**](https://learnwebcode.github.io/json-example/animals-3.json)

**Ans:**

import React from "react";

function Section4() {

const [isShown, setIsShown] = React.useState(0);

const [isVisible, setIsVisible] = React.useState(true);

const fetchAPI = () => {

if (isShown == 0) {

fetch("https://learnwebcode.github.io/json-example/animals-1.json")

.then((response) => response.json())

.then((data) => console.log(data));

setIsShown(1);

} else if (isShown == 1) {

fetch("https://learnwebcode.github.io/json-example/animals-2.json")

.then((response) => response.json())

.then((data) => console.log(data));

setIsShown(0);

setIsVisible(false);

}

else if (isShown == 2) {

fetchAPI("https://learnwebcode.github.io/json-example/animals-3.json")

.then((response) => response.json())

.then((data) => console.log(data));

setIsShown(0);

}

};

console.log(isShown);

console.log(isVisible);

return (

<>

{isVisible == true ? <button onClick={fetchAPI}>Click me</button> : null}

</>

);

}